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WORLD OF MIND.

AN ELEMENTARY BOOK.

BY ISAAC TAYLOR,

AUTHOR OF "WESLEY AND METHODISM."

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PREFACE.

THROUGHOUT the course of the years that have elapsed since the publication of a small volume, "Elements of Thought," I have held in view the purpose of following it by another on the same subjects, but treated more at large. A time of absolute leisure, fitted for the due performance of such a task, I have waited for and never found.

Yet, in place of a continuous season of leisure, there has been given me the leisure moments and the hours of many thoughtful years. During these years the principal subjects of Intellectual Philosophy have been constantly in my prospect, and the volume which is now offered to the public is the fruit of these meditations in this lapse of time.

Intending to put into the reader's hand an elementary book of moderate size, such subjects only are introduced as might be presented apart from controversial references to books, either of the present time or of times past. Any such references, to be serviceable to the uninitiated reader, must be ample and comprehensive, and would demand space very far exceeding that to which I have here confined myself.

The present volume embraces only a portion of those subjects that should find a place in a course of elementary reading in Mental Philosophy. I still keep in view what would give completeness to the plan that has been so long projected.

I. T.

STANFORD RIVERS, *November*, 1857.

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THE

WORLD OF MIND.

I.

STATEMENT OF THE SUBJECT.

1. A DEFINITION can be strictly applicable only when the subject to which it relates is thoroughly known to us. But the subject now before us includes much that is obscure, and to many of the questions which meet us on this ground a conjectural answer only can be given; we therefore abstain from attempting that which, though it might be precise and exact as to the terms employed, must assume more than is certain, and would so far be delusive.

2. In place of a formal definition of what we intend by the word MIND, or by the phrase THE WORLD OF MIND, I offer a descriptive statement, which at least will serve to mark off our proper subject, and to keep it apart from other subjects to which it stands related, and with which it is very liable to be confounded. A descriptive statement, such as we have now in view, must not be regarded as if it were dependent, in any rigid manner, upon the precise words that may be employed to convey it. Language must not affect to teach more than is actually known.

3. MIND, so far as we are cognizant of it by our individual consciousness, and by our intercourse with those like ourselves, and by observation of the various orders of animated beings around us, although it is conjoined with an animal organization, is always clearly distinguishable therefrom as the subject of intellectual science. But when we attempt to describe it, we can only do so as if it were one with that animal framework, apart from which we have no direct knowledge of it in any way or in any single instance.

4. MIND, as conjoined with an animal organization, is that which lives, not merely as vegetable structures live, but more than this; for it is related to the outer world by organs of sensation: it moves, and it moves from place to place by an impulse originating within itself; and it has also a consciousness, more or less distinct, of its own existence; that is to say, it possesses, in a greater or less degree, a reflective life, and it is capable of enjoyment and of suffering.

5. THE WORLD OF MIND comprehends all orders of beings that exhibit those conditions of life which we here specify. The world of Mind is, therefore, a wide world; it constitutes a community that is incalculably extended and multiplied on all sides; it is a community in the midst of which the human species stands as an exceptive instance, in two respects broadly marked—first, by the vast interval which separates it from the classes next below itself on the scale of faculty or power; and, secondly, in a numerical sense, for this higher order of Mind is but as one to millions, incalculably many, of the inferior rank.

6. When we attempt to mark off the world of Mind

on the side bordering toward the lower orders of life —namely, the vegetative—some ambiguity attaches to many of the instances which present themselves on that margin. But the question which often perplexes the physiologist, when he inquires, concerning this or that species, whether it should be accounted animal or vegetable, is wholly unimportant in relation to our present subject. We do not concern ourselves with Mind until it comes to manifest itself clearly by its own distinctive characteristics; and these, if we ascend a few steps only on the scale of animated being, become so strongly marked as to preclude all uncertainty.

7. Then, as we thus ascend, step by step, upon this scale, we find ourselves in the company of beings whose actions, and whose modes of adapting themselves to the influences and the accidents of the external world, are readily interpretable by means of our own consciousness and our own modes of action. This criterion, if there were no other, would sufficiently serve the purpose of assigning any particular class of beings to its due place, as belonging to the upper or to the lower orders. It is by this rule of analogy that we admit any species into the community of Mind, or disallow its claims to this distinction.

8. When the orders around us are considered *physiologically* as distributable into classes, genera, species, according to their visible characteristics, they are incalculably many; but if we pay attention to the very same classes of beings, ceasing to regard their contour and their animal structure, and if we think only of those elements of Mind that are indicated in their in-

stincts, their habits, and their spontaneous movements, it will appear that the grounds of distinction among them are exceedingly few. Physiologically, the orders, the classes, the genera, and the species are countless; considered as belonging to the community of Mind, these same varieties fall under four or five classes. Those visible and palpable differences of form and structure which it is the business of the naturalist to take account of, do not go deep into the framework of the animal system, nor touch the constitution of the mind; genera and species belong to the shell of life, not to its kernel.

9. The distinction here made between the animal structure, with its specific contour, and its functions, and the Mind, is the ground of a distinction that is sometimes lost sight of between what belongs to physiology and what comes properly within the limits of the Science of Mind. The two sciences—the physiological and the mental—do indeed run parallel throughout almost their entire course, and they often intersect each other; and they seem to be so intimately blended that to distinguish the one from the other is sometimes barely possible. Nevertheless, as we shall see, they are two sciences, not one; and the facts belonging to each are susceptible of distinct treatment. A clear perception of this essential difference presents itself as one of the most important of those ends which should be aimed at in an elementary book upon intellectual philosophy. It is not merely confusion of thought, but a crowd of positive errors, that springs from inattention to this distinction.

10. Man—beyond comparison, and with a vast in-

terval between him and the animal orders around him —takes the highest place in the world of Mind, so far as that world is known to us. But the curious question presents itself, Is he, indeed, the chief in that community? Conjectures, founded upon those analogies which we see to abound in the material system, present themselves on this ground, in support of a belief that there are orders of beings as much superior to man as he is superior to others. Now it is not the office of science to step forward and contradict any surmises of this sort; in truth, science must violate its own rules, and must become conjectural, before it could make any such attempt. But then these conjectures, or any hypothesis concerning an intellectual community existing beyond, or beside, or above the human system, do not come within the range of scientific inquiry. This is a caution which should be early given, and should always be kept in view. Science has to do with facts, and with those inferences from facts which may be derived from them on warrantable principles of reasoning.

11. A uniform adherence to this rule will enable us to steer clear of controversies, the introduction of which has given color to the supposition that intellectual philosophy is concerned with obscure, indeterminate, and indeterminable questions, that are equally fruitless and hopeless of any intelligible result.

12. In this place we need only mention two such controversies, in which, though they are as ancient as human speculation, no progress has hitherto been made toward the solution of the problem they profess to deal with. On each side an hypothesis is assumed, which,

as it can neither be proved nor disproved in a conclusive manner, leaves the two standing to threaten each other with demolition. While they do so, the two neutralize each other as to any influence they might exert upon the course of science. Thus, on one side, it has been maintained that THOUGHT, or MIND, is nothing more than a function of the animal organization; that consciousness, feeling, reason, are secretions from the brain and nervous substance throughout the body, and that, therefore, the alleged distinction between animal physiology and the science of Mind is illusory, or that it can be admitted only as a matter of convenience in teaching dissimilar portions of the one philosophy of animal life. On the other side, it has been affirmed, and at least with an equal show of reason, that the material world, with its imagined organization, is a supposition only—an hypothesis, of which there is, and can be, no proof. MIND, it is said—thought and feeling—is the one and only substance; it is the one and only reality in the universe. The external world, as we call it, is a function of Mind, or it is one of its products. On this theory, as well as on the one above mentioned, the alleged distinction between animal physiology and the science of Mind must be considered as unreal, and it can be admitted only for convenience sake in treating various portions of the one philosophy of human nature.

13. Hitherto, and after centuries of acute disputation, no decision has been arrived at between these antagonistic theories; nor are they susceptible of a compromise. There is now as little prospect as ever there has been of our reaching a conclusion which shall be

generally assented to. Yet, in the present tendency of philosophical inquiry, there is a good prospect of what would be equivalent to a termination of the debate, namely, a clear perception, on all sides, of the fact, that neither of these theories can, in any appreciable manner, interfere with, or in the least degree control, the course of genuine science. On either hypothesis we shall be called to give attention to the very same facts, and then we must reason concerning them on the very same principles, and, at length, we must come to the very same conclusions. This *inconsequence* of the two theories will become still more manifest as we advance. The two theories will come to be considered in their place, among other curious and barren products of the abstractive faculty.

14. When it is affirmed—as we now affirm—that within the regions of intellectual philosophy we are occupied with facts, and with warrantable inferences from facts, it must not be supposed that, in this department, the same approach toward indisputable conclusions has been made as in the mathematical, or even in the physical sciences. This is far from being true. Although, in one sense, we know more of Mind than we can ever know of matter, in another sense we know much less; or, rather, there is, on this ground, less of that sort of knowledge which can be reported and spread out to view in a distinct manner. In all departments of philosophy, human curiosity is stopped at an earlier or at a later stage by an impassable barrier—it meets what is inscrutable. The constitution of the elements in the material world is inscrutable; the gravitating force, and the principle of chemical affinity, and the

nature of light, and the principle of vegetative life, these things are utterly inscrutable; so, also, is the principle of animal life; and so, in like manner, but not more so, is MIND. At all these points alike, and as to each of them for the same reasons, we reach a limit which the human mind has never yet passed. But it is not true that Mind is more occult, as to its inner nature, than is matter, or than the principle of vegetative and animal life; they are exactly as much so, and not more. But there is here a difference to be noted which must not be lost sight of:

15. In all departments of the physical sciences and of natural history, the facts which we have to do with are various and countless; and they are also definite, and palpable, and visible: it becomes our business to classify innumerable forms—and each attractive in its way—and to ascertain the diversified functions of many orders of organized beings. In each department of these sciences, whoever devotes himself to it finds that there is before him the occupation of a life. He knows, indeed, that a mystery which he will never penetrate stands in advance of him, but then it is placed at the remote end of his inquiries; if, once and again, he looks out toward it, he is quickly called off from the pursuit of a fruitless speculation, and he gladly returns to a field of profitable labor and inquiry—a field on which there are inexhaustible riches to be gathered and housed.

16. In the region of intellectual philosophy, the whole aspect of things is of another sort, for in this department the facts we have to do with are few, and, in the mode in which the science is usually presented,

these few facts assume a very meagre appearance. Moreover, there is much on this ground that is dimly seen and that is confusedly apprehended; and then, at the last, the matured fruits of much patient thought must be consigned to popular language, which, at the best, is a precarious medium for the conveyance of abstract notions.

17. Hence it is that, at an early stage of our progress on *this* ground, we feel as if we had exhausted our materials, and must go in quest of occupation. We soon find ourselves, therefore, in front of that barrier which, in the departments of physics, of chemistry, of physiology, and of natural history, is always a long way in advance of our position, while we are occupied with what engages every faculty. In the philosophy of Mind we become impatient to push forward, and yet find that we can not do so. We are apt, therefore, to imagine that much more of mystery attaches to the world of Mind than belongs to the world of matter; or that, while the visible universe may be freely explored in all directions, a pall which we can never lift rests upon the intellectual universe. We shall see that this is not the fact. The mystery is just as dark in the one case as it is in the other; the ultimate problem which, on all sides, arrests human curiosity, is as insoluble in the one case as it is in the other; the only difference is this—that, in the one case, it stands so near to us as to overshadow our meditations and to chill our energies, while, in the other case, it is seen only as a cloud in the horizon.

18. We have mentioned a disadvantage which is inseparable from our present subject, arising from the

unfixedness of the symbols which we are compelled to employ, namely, the terms of popular parlance. When facts that are indistinctly apprehended come to be discoursed about in terms of uncertain or of variable import, there must be large room for interminable controversy. Then, besides these occasions of debate, there is this—that, although intellectual philosophy demands certain qualities of mind which are not the most ordinary for its successful prosecution, it tempts many to enter upon it who are neither able nor are disposed to confine themselves to a strict scientific style: it is a field open to all, and which is wandered over by many who have little natural aptitude for pursuits of this kind.

19. Treatises upon the physical sciences are usually introduced by historic notices of the progress of discovery in that department from the earliest ages up to the present time, but in these preliminary surveys several theories and systems, long ago superseded, are disposed of within the compass of a paragraph or two. These antiquated theories have now no adherents, and we do ample justice to them in a page. It is not so within the precincts upon which we are about to enter. The earliest developments of thought on this ground still possess a claim to be listened to, for they may be as good as some of later date, and they may be preferable to the very last that have appeared. A consciousness of this fact, on the part of those who profess intellectual philosophy, has induced most of them to treat the science historically and critically rather than in a direct and didactic manner; they have not merely reported ancient opinions, but have thought

it incumbent upon them to discuss their merits, approving or disallowing each scheme as it passes in review.

20. But this retrospective style, which must be prolix, and which is likely to be wearisome to the general reader, is far from being adapted to the purposes of an elementary book. Nothing of the sort, therefore, is attempted in this volume. It must, however, be understood and supposed, first, that the writer of such a book has acquainted himself with his subject historically; and, secondly, that he fairly puts his readers into position for understanding more elaborate works on the same subject, if any of them should wish to acquaint themselves with it hereafter in a more careful and ample manner.

21. From what has been here said of the unfixedness of intellectual philosophy, and of its being open to controversies which are revived from time to time, it must not be inferred that every thing is vague and undetermined within its precincts. This is not the fact. The advance and consolidation of the physical sciences have given an indirect, and yet an effective impulse in the right direction to the science of Mind: a real progress has been made; an advanced position has been attained, from which we are not likely to be dislodged. Certain illusory and sophistical systems have nearly fallen out of esteem, and perhaps will never regain their influence. At this time, therefore, there may be gathered, from the works of modern writers on intellectual philosophy, what might be called a catholic belief concerning the intellectual and moral constitution of man. These appreciable advances to-

ward an accepted system warrant the expectation that more will yet be done to give the subject that coherence and fixedness which shall entitle it to a place among established sciences.

22. It is reasonable to ask, With what specific intention is it that we should enter upon the ground which is now before us? What fruit are we likely to gather in our course over it? and what relation does the science of Mind bear, either toward other sciences, or toward the practical purposes of life? In giving an answer to questions of this kind (in any department of philosophy), those who profess to teach it are indulged with the liberty to say every thing that can with an appearance of reason be alleged in its recommendation, and to enhance, as far as possible, as well the intrinsic as the relative importance of the studies to which they have devoted themselves for life. The professors of intellectual philosophy have usually availed themselves of this license, and they have labored to establish the opinion that many extensive reforms and improvements—in education, in politics, in social economy, and in morals; in law, and in theology—would result from a more general and a more serious pursuit of it than is usual. Were this noble science—the first of the sciences—say they, to be listened to as it ought, the above-named sciences and social arts would take a new start, and would diffuse unthought-of blessings on all sides.

23. No professions of this sort will be made in the present instance, for, in truth, the writer entertains no such exalted belief. Nevertheless, he attaches to his subject a real importance, and he is fully of opinion

that it deserves and that it would repay much more attention than it generally receives, and particularly that it might, with great advantage, be employed as a means or an instrument of education during the later years of a course of study. It is greatly with a view to this purpose that this elementary book is put into the reader's hand.

24. Something still more definite than this may fairly be said in recommending our subject to the intelligent reader. In several instances, the indirect effects of a course of study are of more importance than any direct benefits which it may seem to hold forth as the ends or reasons why it should be prosecuted. This, undoubtedly, may be affirmed of classical studies. The direct advantages of a knowledge of the languages of ancient Greece and Rome are few, or they are such as attach only to certain professions. But when they are regarded as supplying the means of culture and refinement, no other pursuits can come in the place of them. A system of education which excludes a knowledge of Latin and Greek may meet the occasions of common life well enough, but it can never impart refined tastes, or give a full expansion to the intellect.

25. As much as this, or nearly as much, may be affirmed in behalf of intellectual philosophy. The human mind, in the study of its own structure, elaborates its faculties. In these studies its native forces are augmented, and habits are acquired more exact and more refined than such as are formed either by a mathematical training or in the pursuit of physical science. If, therefore, we should fail to make a good

plea for these studies on the ground of their direct practical utility, we should certainly succeed in recommending them as among the best means of intellectual culture. On this sure ground, therefore, it is well to take our stand. In religion, in politics, in social economy, the current of public thought runs strong, and it is seldom influenced, in any appreciable manner, this way or that, by forces so attenuated as are those of intellectual philosophy. Nevertheless, it is true that some men—a few they will be as compared with the mass—may, in these studies, find the means of exempting themselves, individually, from the violences of that current, and may, from this higher ground, take a wider survey of social interests.

26. But to some minds mental science will be more than a temporary means of intellectual culture; it will be more than a method of training resorted to in the years that precede a man's entrance upon the business of life. The world of Mind will be the home of thought to a few, and especially it will become such if the breadth, the height, the depth of this universe of life are fairly opened up, and if, in the place of the evanescent subtilties of a cold analysis, there is brought before us the boundless objects of that great system throughout which the energies of conscious life are in course of development. If the phrase were used in an emphatic sense, then we should say that the world of Mind is the real world; and if only it be set forth in its vastness and variety, it will draw toward itself those spirits that are the most alive, and with whom feeling, and volition, and power—consciousness, and reflective action, and progress, are the characteristics

of the individual. As it is the distinction of man that he turns his thoughts inward upon the centre or source of thought, so it is the characteristic of a few minds that this intensity of life is with them their normal condition: they are reflective, by eminence, among their fellows, just as man is distinctively reflective among the orders around him.

27. We have said above (17) that because, in the department of mental philosophy, we sooner than in the physical sciences arrive at that barrier beyond which the human faculties make no progress, there ensues an unfounded supposition that a mysteriousness attaches to the former from which the latter are exempt. We have shown how it is that this illusory notion springs up. But having arisen, it is always likely to float about in the regions upon which we are entering. The hold it takes upon minds that are mystically disposed is strengthened by the imperfections of language. Now, therefore, when we are asking what are those useful purposes which may be secured by making acquaintance with intellectual philosophy, our answer is this: that, in doing so, we set ourselves free, or may do so, from the influence of this and similar illusions, and thus we may stand safe in regard to those bootless speculations which from time to time threaten the subversion of the most momentous truths.

28. Let it be well understood—once for all, and so that we shall not be compelled to retrace our steps—that the unfathomable abyss toward the brink of which the human mind is ever tempted to draw near is as close at hand in the fields of physical science as it is in the field of intellectual philosophy; only that, in

the former, we are longer detained from looking down into it, and are more easily diverted from our purpose, and are sooner induced to draw back from the border. If we convince ourselves of this fact—and we may easily do so—then the one region of philosophy becomes as clear from clouds, and as open and safe, as the other. There are no mysteries on this ground if we do not make them, or there are none with which we need concern ourselves, if only we adhere to the authentic and universally-admitted rules and practices of modern science.

29. Still it must be so that to some this region will be a haunted ground. The questions that meet us stimulate curiosity in minds that are constitutionally inapt for abstract thought, or are incapable of strict analysis, and which quickly lose their grasp of what, for a moment, they have apprehended. Minds distinguished more by ardor than by strength, more excursive than analytic, are apt to imagine, at every turn, that a startling discovery is opening before them, and that to-morrow they shall be able to lift the veil which so long has concealed "the hidden nature of things." Do we ask, then, what is the *utility* of the studies upon which we are entering? This if no other useful result may be secured, namely, an exemption from the invasions of lawless and interminable speculation.

II.

DISTRIBUTION OF THE SUBJECT.

30. In an elementary book, the rule of convenience in the order of subjects is usually of more importance than any imaginary good resulting from a strict adherence to a more exact or logical method. I shall follow this rule in the present instance, and shall adopt an arrangement which, as I believe, will be advantageous to the reader, although it deviates from the direct path.

31. Looking to subjects of all kinds which ordinarily take a place within the circle of intellectual philosophy, they present themselves as susceptible of an obvious distribution under three heads, as thus: there are subjects belonging properly to the PHYSIOLOGY of MIND, or psychology, as it is now called; such are whatever relates to *sensation*, *perception*, *memory*, and the like; secondly, themes of a more abstruse kind, and which may be designated as METAPHYSICAL: the terms *space*, *time*, *cause*, and *effect*, belong to this department; thirdly, there is what constitutes the science and the art of *logic*, which undertakes to show the methods best adapted to the acquisition and to the conveyance of knowledge, as well as the methods of reasoning and of philosophizing in all the sciences: the terms *induction*, *deduction*, *syllogism*, *evidence*, *doubt*, *belief*, and the like, belong to this third department.

32. This same distribution of subjects (adopted in a book long ago published*) I propose now to adhere to, with this difference only, that we shall take up the three in a different order. Metaphysical abstractions are a product of the human Mind when the faculty of abstraction has been called into exercise, and has developed itself in some good degree; therefore, in strictness, it could only claim a subordinate place in a scheme of mental science, for the subjects it includes are fruits or results of a certain mental faculty. But, in like manner, the pure mathematics might be so regarded, for these also are a product of the same faculty, although employed in a different direction, and as confined to a particular class of ideas—those of number and extension; therefore this body of determinate thought might be challenged to come into its place, and might be required to contain itself within a chapter of a treatise on mental science. But a method of proceeding such as this would be highly inconvenient; nor could any thing that might be said in favor of its logical fitness reconcile us to so arbitrary a course.

33. Whatever the human mind has wrought out of its own stores, or chiefly so, by the exercise of its inherent powers, and with little aid from the outer world, might, on the same principle, if strictly applied, be assigned to its place in a comprehensive scheme of mental philosophy. All those products of reason which place man, when cultured, in a position immeasurably in advance of the animal orders around him, are the fruit of processes of thought, in the course of which the Mind—not, indeed, as if disjoined from

* Elements of Thought.

the material world, but yet as holding itself off from it—works with, and upon itself, bringing itself to a bearing upon the external world, indirectly only, or as if at nodes of its orbit.

34. In prosecuting the physical sciences, we employ ourselves upon objects or phenomena concerning which we can know nothing by anticipation, or any otherwise than by observation and experiment; and while acquiring, in this way, what we come to learn of the material universe, the Mind employs its faculties unconsciously as to the mechanism of its own powers: it would be absurd, therefore, as well as inconvenient, to bring the physical sciences into their places as chapters in a scheme of mental philosophy.

35. Equally inconvenient would it be, and yet not in the same sense absurd, to bring mathematical science into its place in such a scheme. Less inconvenient, and, on some accounts, reasonable, would it be so to treat metaphysical abstractions. Yet there is a reason sufficient for keeping these also apart, and for regarding them as entitled to an independent treatment. In like manner as we conceive of the relations of extension and number as having an eternal reality, and accept them as truths unchangeably certain, even if there were no material world, and if there were no created intelligences to apprehend them, so, as to those abstract notions which are embraced in the circle of metaphysical sciences, we imagine them to be unchangeably true, and believe that they must remain what they are, although all minds also were to become extinct. This, at least, must be said, that these abstract principles have an aspect of independent and

unchangeable reality, such as compels us to conceive of them in this way.

36. We give to Metaphysics the foremost place in this elementary book for this reason—that if we succeed in setting the subject clear of mystification, and if we lay down a safe road on the border of abysses, real or imaginary, our after-course will be much less perplexing than otherwise it might be. We do not commence with a profession that we shall be able to send a plumb-line into the depths of speculative philosophy, but this we may do—we may show a margin-ground upon which we may walk with satisfaction.

37. The order of subjects, therefore, is this: First, we take in hand those abstract notions which belong to Metaphysics; and this initial work may quickly be dispatched. Secondly, we shall have before us a wide field—the physiology of Mind—Mind as known to us on all sides. Thirdly, Logic will come to be considered, or, rather, the methods of reasoning proper to different subjects.

III.

METAPHYSICS:

ULTIMATE ABSTRACTIONS.

38. THE popular belief concerning the subjects which are now immediately before us is this—that they are in an extreme degree difficult of apprehension; that they are obscure, indeterminate, and such as can be attractive to none but a very few whose minds are peculiarly constituted.

39. A supposition of this kind is so far well founded as this—that metaphysical notions are not to be distinctly apprehended without some effort of attention or labor; and it is for this very reason that they may, with so much advantage, be made use of as a means of intellectual discipline. Further than this, the popular belief is well founded; for it must be granted that, when metaphysical problems are treated controversially, and critically, and historically, the discussion of them drags itself out to great length, and it is apt to become, at every stage, less and less intelligible, and less and less attractive, except to a very few.

40. It is, or it may be, otherwise if only the limits of the human faculties in this region are seen and are regarded; if verbiage be avoided, if brevity be studied, and especially if a writer in this department be free from the ambition to create for himself a reputation as a discoverer or as a reformer. In this case metaphysical science may be simplified, and it may be brought within narrow limits.

41. Great freedom in the use of language may safely be admitted in treating the physical sciences, because the things which are spoken of are near at hand —visibly or palpably, whether they be material elements or organized bodies, so that if any ambiguity has had place, it may at once be dispelled by a reference to the objects or the phenomena in question. In mathematical reasoning, no license or freedom whatever in the employment of its symbols can be allowed, or, indeed, could be desired; for these symbols having a fixed connection with the quantities or with the relations which they represent, the certainty of the proc-

ess of reasoning, in any case, depends upon an undeviating adherence to the value and meaning of each term.

42. In treating metaphysical abstractions, we can neither avail ourselves of the advantage of making a reference continually to things visible, concerning which we are reasoning, as we do in the physical sciences, nor, on the other hand, can we go on with a chain of demonstrations without any such reference, as in mathematical reasoning. For on this ground, that is to say, when we are carrying on any process of thought concerning purely abstract notions, ordinary language, which is our only medium, is not susceptible of any such fixedness and precision as belongs to geometric and arithmetical symbols. The remedies applicable to these inconveniences are two: the first is, to study perspicuity and simplicity in style; and the second is, to be on our guard, at every step, against the easily-besetting error of supposing that, by means of some newly-phrased expression of abstract notions, we have penetrated the mysteries of being, and have placed ourselves in advance of the philosophy of our times. The only advance which the human reason is likely ever to make on *this* ground will consist in the final removal or dissipation of imaginary mysteries, and the putting out of fashion all attempted mystifications. Whoever shall do this effectively will have rendered a good service to abstract philosophy.

43. The words *three*, *five*, *eight*, *twelve*, have no meaning if they are taken purely and singly, and are held apart from all other words or ideas. But they

may acquire a meaning in two ways—either by linking themselves to substantives, such as the words *dice*, *pence*, *planets:* three dice, five pence, eight planets, twelve men; or otherwise by excluding all mental recollection of things actual, while we use the words as expressive of certain relations that subsist in and among these quantities, as thus: $3+5=8$; or $8\times12=96$. These words, or the figures employed for convenience to represent them, when they have thus been packed together, acquire a significance which they did not possess before; and on the ground of these acquired meanings we may go on reasoning without end, and with the most absolute security, although, from the beginning to the end of the longest calculation, they never pass from their purely abstract condition. The reasoning faculty would gain no aid, but, on the contrary, would encumber itself by endeavoring to keep hold of some concrete conception, as, for instance, by thinking of dice, or pence, or any thing else at each step.

44. But in entering upon the region of metaphysical abstractions we do not find it so easy to hold these notions in their purely abstract condition, and therefore we are apt to seek the aid of frequent exemplifications or instances. It is only as the result of much discipline and practice that we can follow them, and can trace their relation one to another with any such ease as that which attaches to arithmetical or geometrical reasoning. At the end of a book of arithmetic various examples are placed before the learner for his exercise in applying the rules which he is supposed already to understand, and for showing him how these

rules may be made available for the purposes of common life. But in metaphysical treatises examples are appealed to almost at every step for the purpose of assisting the mind in its efforts to retain its hold of abstract notions. We cross and recross the line from the abstract to the concrete continually, lest we should lose our path.

45. It is necessary to keep in view this difference *in method* between mathematical and metaphysical science. This difference does not go to prove that the one class of abstractions is *more abstract* than the other, but only that they are less easily kept apart, and less easily dealt with one toward the other. If mystery seems to attach to the one class rather than to the other, it is such only as springs up in each mind from its own confusions, from its inaptitude, or its want of discipline, or perhaps from a futile attempt to go beyond the limit which, on all subjects alike, mathematical, physical, and metaphysical, circumscribes the human faculties.

46. After I have ascertained the relation of the hypothenuse of a right-angled triangle to its two sides, if I go on to ask, But what *is* this "extension" which I have assumed to be reality, and which sustains this process of reasoning?—if I do this, I lose myself upon an endless path, or, rather, I tread a circle which brings me round, ever and again, to my starting-point. In like manner it is that we come to a limit (as above stated) in treating of metaphysical abstractions. Let us only be aware of the fact, and keep to our line accordingly.

47. The most frequent and the most familiar of the

processes of abstraction is that which takes place when, in looking at or in thinking of an object of any kind, we mentally put one of its properties or qualities in the place of another *of the same order*. Thus, if a solid sphere be in view, or if I am thinking of such an object, and if its color is blue, I find it easy to imagine it to be of any other color—it might be red or yellow. These colors, therefore, are in idea separable from the object before me. I can think of them apart from it; I can take them up in turn, and can attach them to or can detach them from the surface of the mass. But at the moment when I attempt any such disjoining of qualities, I find the need of a term —a name, without the aid of which this shifting of my own conceptions would be difficult. This need of language in dealing with abstractions becomes more urgent in proportion as the sensible qualities of any objects are more specific and peculiar. Thus, even if I might perhaps dispense with the words *red*, *yellow*, *blue*, in thinking of those colors generally, or as they are seen in the optical spectrum, I can not do so when I am thinking of such specific tints of color as distinguish iron, silver, zinc, tin, lead, and a thousand others. I must name something which is permanently of that precise color, and this name fixes itself in my recollection by its recalling other sensible properties with which it is always in fact associated: thus the color of zinc, as distinguished from the color of tin, keeps itself distinct in my thoughts by help of its combination with the weight, the feel, the hardness, and the taste and smell of the two metals; the compound term, *color of zinc*, serves to bind together several qualities,

affecting the senses of sight and touch, and which, when thus made up and ticketed, may be distinctly recollected and discoursed about.

48. But it is for quite a different reason that we have need of the aid of language, and, in truth, are absolutely dependent upon its aid when we advance from the simpler kinds of abstraction toward those which are more remote. As to some of these, as we shall see, it would not be possible, even for a practiced mind, to keep its hold of them, unless by the help of a word which has come to attach itself to the notion we are laboring to render distinct and permanent. Let us see in what way we arrive at notions of this more precarious or evanescent kind.

49. We go back, then, to the easiest sort of abstractions—those, namely, which result from the separation of one quality in any object from the other qualities by which it makes itself known to us through the senses of sight, touch, taste, smell, and hearing, or through any two or more of these senses combined.

50. A sphere is before me which I touch, and find it to be solid and hard: its color is a gray blue—the color of iron. When struck, it gives a sharp metallic sound. If I apply the tongue to it, it affects the taste in a peculiar manner. Let me retain the idea of the solid sphere, but suppose it to show a bright vermilion; and instead of the hardness of iron, I impute to it the hardness of lead; and instead of its deep sharp sound when struck, it gives the sound of a wooden ball; and instead of a chalybeate taste, it has the taste of sugar.

51. All these substitutions of sensible qualities, one

for another of the same order, and of such a kind as might be true in fact, are easily made; and it is also easy, in imagination, to make mental substitutions of the most incongruous kinds. Thus, although I have never seen a green horse, yet I can fancy such a one. I have never had in hand a piece of charcoal that would take impressions like wax, but the idea is conceivable. It is thus that we can go on, without end, in readjusting, or in assorting in some new manner, the various impressions that are made upon the senses by external objects. It is this facility of readjustment which is the germ of the mechanic arts, as well as of those higher products of the human mind which are realized in poetry and the fine arts.

52. From this easily-understood process of substitution we advance a step toward what is more purely abstract when we remove from our idea or conception of any object one entire set of its sensible properties. Thus we have supposed the sphere to have a metallic taste and smell; but we now think of it as devoid of those properties: in this respect it is as a globe of glass. We have supposed it to be sonorous; but now it returns no sound when struck. We have seen it to be of a bright color; but we imagine it to be colorless —it is translucent, and it is so placed as to show neither reflection of light nor refraction; but it retains its solidity and its spherical form.

53. We next suppose the sphere to pass into a spheroidal figure—prolate or oblate; or it assumes any other form, whether regular or irregular. But if, beyond all these subtractions of sensible qualities or these substitutions, we go on to imagine this same

solid mass to be entirely divested of form or definite shape—if we endeavor to think of it as having no contour or outline, our ideas become confused, and we are warned that the abstractive faculty has come near to its limit in this direction. Nevertheless, we retain our hold of the vague notion that remains by help of the phrase *solid extension*, or of some other term of similar import, which stands as the symbol of something which we believe to be real, although it has gone beyond the range of the conceptive faculty.

54. Let us, then, retrace our steps so far as this: we call back the conception of figure, and we keep in view, as before, a solid sphere—tangible, if not visible. I embrace this mass between the right hand and the left hand, and find it resists my efforts to join hands: it *is* where it will not allow *me* to be at the same time. Yet it may become soft, or fluid, or gaseous; nevertheless, and although now it has yielded to my hands, I still believe it to be, as it was before, an occupant of space, and, as an elastic gas, it may fill a space many thousand times larger than it did as a solid or as a fluid.

55. But now, although we should hesitate to affirm that extension is a property which is common to Mind and to Matter, nevertheless the Mind, as seated in the animal organization, and when it exerts its force through the medium of the nervous threads and the muscular system, becomes conscious of extension, and of solidity, and of the *vis inertiæ* of matter. What may be implied in this consciousness as to the correspondence between Mind and Matter, this is not the place to inquire, for such an inquiry belongs to psy-

chology, not to metaphysics. All we have now to do with is that process in the course of which we arrive at these notions of extension and solidity as properties of matter, and also of that force, as related to the external world, which is the inherent property and the prime element of Mind as distinguished from matter: matter does not move matter otherwise than as a medium, but Mind does move it.

56. That the objects to which we impute extension and solidity are *real*, and that they are not mere states of the Mind itself, is a belief or an intuitive persuasion which returns upon us irresistibly if for a moment we have labored to persuade ourselves to the contrary. This belief combines in itself the concurrent evidence of two or more of the senses—sight, touch, and perhaps hearing, and taste or smell.

57. But, moreover, that those bodies which excite in me this belief do indeed exist independently of me, I have this further evidence, that although the *vis inertiæ* which belongs to them may, within certain limits, give way to Mind-force, so that they are displaced by it, they do not obey my mere volitions, or yield themselves to my control in any manner analogous to that in which the states of the Mind itself are under control. The difference is so clearly marked, and is so great as to bear down and to crush any sort of sophistry by which it might be attempted to blend the two experiences into one. Over the states of the Mind itself, if the Mind be in a healthy condition, and if it be disciplined also, it exercises an almost unlimited control; within its own home the Mind is absolute, or nearly so; but as to the outer world, and the modes

in which the outer world affects the Mind through the senses, matter is absolute; Mind is passive and submissive.

58. Solid extension, let us say that of the sphere, may be conceived of as spreading itself out further and further, until it fills a planetary orbit, or until it embraces the starry universe; and it may go even beyond this limit; or the line which we have supposed to produce itself from point to point may go on moving forward in the same direction without end and forever. At any one stage of its progress, what should forbid its advancing one other stage; and then, why may it not do the like again? This supposition of an endless progress, or movement onward, though we fail to follow it conceptively, compacts itself into an abstract notion for which we require a name, and we call it The Infinite, or Infinitude.

59. But an event of another kind may be imagined as possible. In truth, it is an event which obtrudes itself upon our thoughts, and which, when once it has occurred, we find it impossible to dismiss entirely. The solid sphere which just now I had before me, and which I felt and saw, may not only *disappear*, or cease to be felt and seen, but it may have *ceased to be.* We may imagine this, at least: not that it has flown off, and so might be overtaken somewhere, but we may suppose that *it is not.* What is there, then, where it was, but where now it is not? The answer may be, Nothing; for I may imagine the atmosphere and every gas removed from where it was. But the word *nothing*, if it be taken in its simple sense, does not quite satisfy the mind. The annihilated sphere has left a

sort of residual meaning in its place, or a shadow of reality which asks a name. This remainder of meaning is symbolized or represented by the word SPACE, and when we have accepted it we feel as if an intellectual necessity had been supplied.

60. To the bare notion which the word *space* enables us to retain some sort of hold of, we render back a portion of the properties of solid extension, and on this foundation build the most certain of the sciences. Thus we allow ourselves to think (or to speak, if not to think) of space as divisible into parts, and as susceptible of measurement, and also as capable of endless progression outward from a centre. In this way we come to speak of INFINITE SPACE. Here, then, is an abstract notion from which I have removed all sensible properties—nay, all properties, whether sensible or only conceivable, and yet I am not content to call it nothing; nor can I rid myself of it: it is like to nothing; it clings to my consciousness; it is, or it has become to me, a law of my intellectual existence. I can not think of myself or of any other existence otherwise than as occupying space.

61. Beyond this limit and in this direction no human mind has hitherto made any progress, or has shown us how we may analyze the notion represented by the word space. The analytic faculty has at length fully done its office, and the result is an ultimate abstraction.

62. As often as any such process of thought brings us into the presence of a notion beyond which we make no advance, we look about for a word that shall mark the terminus, or, as we might say, that shall

keep possession of something which we have acquired with labor, and which yet we find it equally difficult to retain or to dismiss. After some severe mental process has driven off, one by one, every conceivable property which we may imagine to be removable from the object, we then consign the vague residue, or what we might call the ashes of thought, to the custody of an abstract term, such as the one we have just now mentioned.

63. Another of these ultimate abstractions which so enters into our consciousness as to become an inseparable element of it, is that of DURATION, or, as measured into equal parts, TIME. In a manner analogous to that which gives us the idea of extension—length and breadth—we derive from our consciousness of continuous being the notion of duration, or time. From this notion we do not find it possible to set ourselves free. We can not think of existence at all as a single point that has no continuance.

64. Although duration must be made up of a succession of instants, even as a line is constituted of points, no one of which has any magnitude, yet our consciousness always embraces more of it than any such single instant, and it is only by an effort that we force ourselves to distinguish the instant actually present from the instants that are just past. Time is to us a flux, of which we take possession of a greater or of a less breadth; it is as if the *now* of our existence stretched itself over an appreciable area. The estimate we form of the length of any marked period of time depends partly upon the state of the mind itself, but mainly upon a habit which spontaneously

arises from the references we make to the mechanical and the astronomical measurements of time. If it were not for the clock, and for the alternations of day and night, our estimates of the passage of time would be liable to very great variations. But these facts belong rather to the physiology of the Mind than to our immediate subject.

65. An absolute separation of the physical from the metaphysical is not easily effected or adhered to on this ground, for many feelings and habits which will hereafter claim to be considered mix themselves with the merely abstract notion of which we are in quest. For the purpose, therefore, of keeping clear of these mixed conceptions as far as possible, we return to the illustration above adduced—a solid sphere, which we may imagine to be before us, is suspended in space. It is unchanged; it is unchangeable as to its properties and conditions; but while we have been looking at or thinking of it, we have ourselves passed through a history—we have existed through a line or flow of existences, of which, singly, some account might be rendered. This period is not one existence, but it is a series, and it must be so, as well to this sphere as to ourselves: the one, as well as the other, combines two elements—the instant now present, and the existences past, that have ceased to be instant. In our minds the two elements melt into each other, and form an idea or conception of continuance in being, and we are intellectually compelled to attribute duration to the unconscious sphere not less than to ourselves.

66. This same conception attaches itself, in our minds, to all other existences, even to those to which

we impute neither change nor consciousness. As the fluxion of a point gives us the notion of linear extension, so the fluxion of an instant gives us the notion of duration; and the persistence which belongs to thought enables us to retain our hold of large portions of this ever-flowing existence.

67. We fail to exclude from our idea of this solid sphere—although it has undergone no change whatever—the idea of a history, albeit it is a history without events: it has continued to be, and it has run parallel with our own being through time. We arrive, therefore, at the abstract notion of duration, taken apart from all idea of change or evolution, or of passage from one condition to another.

68. As extension may run out toward the infinite, so existence, as related to time, may run out toward the infinite; and then we have before us the inconceivable notion of duration, without beginning and without end.

69. Our consciousness of extension as divisible into parts, and our consciousness of a flux of being constituting a history, give us aid in keeping possession of the abstract notions of space and time; but we may at least conceive of the extinction of all beings, material and intellectual. There would nevertheless remain—what we can not imagine otherwise than that they should remain—namely, space without bounds, and duration without bounds. The sphere, in ceasing to exist, does not release us from the notion of space, nor, in ceasing to exist, does it release us from the notion of duration; but when the human mind has come to touch this border, it must be content to retrace its

steps toward the concrete: whatever there may be outstretched beyond this limit, it is what can never become an intelligible object of inquiry. The faculty of abstraction, as developed in the human mind, has exhausted itself in this direction.

70. And yet as far as this we *must* go by a sort of necessity. The fact that the language of every cultured people possesses terms representative of these ultimate abstractions, is proof conclusive that the human mind is so constituted as that it must go on to this extent, and so conceive of the infinite as apart from actual existence — a succession which has no changes; a track which leaves no trace; a line which has no breadth and no angles, which intersects nothing, which is parallel to nothing, which arises nowhere, and which ends nowhere and never.

71. Why it is that I can not disengage my thoughts from these two spectres—infinite space and infinite duration, void space and unchanging duration; why I can not release myself from ideas which at once refuse to depart, and yet mock my endeavors to grasp them, is a question the answer to which, so far as it admits of an answer, must be sought for in looking to the structure of the human mind, considered physically, or as to the elements and laws of its constitution. At this stage it is enough to know that we have touched the limit of those abstractions which come within the range of our faculties.

72. There is, however, yet an intellectual necessity to be supplied; a word or two is still needed, to which we may hand over a residue of meaning, after all distinct meaning has been discharged from our mode of

conceiving of things in the concrete. We have spoken of the material world and of the immaterial as existing or as ceasing to exist. This or that object *is* or it *is not* in being. While it exists, and after we have removed from our idea of it, one by one, all the properties by which it has become cognizable to the senses, we still suppose its continuance in space and time. The words *being* and *existence* offer themselves as representatives of this denuded conception, and we seem to strengthen their import a little by means of the word *substance*, which, as its etymology indicates, represents the unknown support of all qualities and properties. We have need of the belief that the sensible properties of things are *set* upon something beyond or something deeper than themselves, and which is absolutely occult.

73. This same necessity attaches to our consciousness of our own existence. In place of the sensations which just now connect me with the objects of the external world, I may imagine other objects, other places, and other things, or I may cease to attend to these sensations, and, withdrawing myself to the ideal world, may imagine other scenes, and from these may derive the means of states of feeling of any sort.

74. Throughout the course of any such substitutions or shiftings of scenes, whether voluntary or otherwise, I retain a persuasion of my own individual continuous existence apart from and independent of any changes arising either from within or from without. I AM, whether I think and feel in this manner or in any other, or not at all.

75. The idea of existence has so much tenacity that it holds itself entire, even if, as we now suppose, every

sensation and feeling has subsided or vanished. I believe that I might pass through a moment, an hour, or any other period, in utter unconsciousness, and yet should continue to *be;* and in a moment after such a period, might wake up to the varied experiences of common life.

76. The question is not now whether the human mind does ever, in fact, collapse into any such condition of unconsciousness, or whether it might remain in such a state a day, or a century, or for ages. Questions of *this* kind are physical, not metaphysical. But, whether the fact be so or not, it is certain that the abstractive faculty goes on until we look for a word which may save us from a feeling as if the powers of thought were stagnating. We speak, then, of *being*, or of *existence*, and of *substance*, material or immaterial. These words represent nothing that can be analyzed, for the notions they convey (if any) have no constituents; we have already discharged from them all constituent ideas, and therefore they can yield no results as objects of speculation.

77. It is not here either affirmed or denied that there is a depth in the nature of things which these abstract terms conceal from our view. We say only this, that they mark the boundary of abstraction, so far as the human mind is concerned. Nevertheless, there will always be a tendency to push forward a little farther. Minds that are more fertile than analytic, more vivacious than exact, and that are ambitious too, and smitten with the charms of the inscrutable, will be ever and again working at these insolubles; and which, when they have packed customary abstract phrases in

some new fashion, will exult in the persuasion that they have at length mastered the mysteries of existence, and have come up from the abyss laden with precious ore.

IV.

METAPHYSICS:

MIXED ABSTRACTIONS.

78. It is important to keep in view a distinction, often lost sight of, between what may be unknown in fact to ourselves individually, and because we have had no means at present of gaining access to the knowledge of it, and what is unknown because it transcends the range and limits of the human mind. For example, the contents of a sealed letter which I hold in my hand, or of a casket of which I have not the key, are unknown, and so is the condition of the planets as inhabited or not: these are things which perhaps I shall never be informed of, but I might know them if I had access to the facts. But what may be the inner constitution of the material and immaterial worlds I do not know, and I may well suppose that this mystery will ever remain beyond the reach of human science. It is certain, also, that much which, on grounds of the surest reasoning, we hold to be true in theology, can be apprehended no otherwise than indistinctly by the human mind; thus the perfections of the Infinite Being are assumed as certain in our meditations, although we soon feel that here the powers of reason are baffled.

79. The class of abstractions of which now we have

to speak are called Mixed Abstractions, for this reason, that there is blended in them something of what the mind has a perfect control over, and therefore knowledge of (although individually we may not have come to know it), along with something *in nature* which is indeed inaccessible by any method which human science has at its command. From this intermingling of the known and the unknowable much confusion has arisen, and some controversies also, which appear to be inexhaustible, hence take their rise. There is a set of abstract terms the mere hearing of which excites the idea of interminable and fruitless debate: such are the words *causation*, *liberty*, *necessity*, *free will*, and some others, which usually accompany them.

80. In entering upon this much-debated ground, we shall secure for ourselves some ease of mind by the simple means of keeping an eye upon the distinction above referred to. The popular notion is, that metaphysical principles are abstruse and incomprehensible, while whatever relates to the actual nature of those things with which we are familiar must be easily comprehensible. A little attention will convince us that the very contrary of this is more near the truth.

81. Pure abstractions, such as those which we have now lately had to do with, may not hitherto have engaged our attention, and therefore it may happen that, when we hear the terms in which they are conveyed, we may fail to connect with them any clear ideas. In the same way we might open a treatise upon the Conic Sections, and understand nothing more of it than we should in looking into a Chinese tract; yet it is certain that, if we gave time and attention sufficient to

this mathematical treatise, we should come, in the fullest manner, to a knowledge of its meaning. A mathematical theorem is the product of the human mind—nothing more, and it must therefore be comprehensible by any human mind possessing ordinary intelligence. The same also may be affirmed of whatever is purely metaphysical, for *this also* is a product of thought—simply so, and therefore it can contain nothing that is incomprehensible by minds that are sufficiently disciplined in subjects of this class. The human mind may imagine mysteries among its own products, but it can not make them.

82. And thus it is that the terms we have now to do with, so far as they are purely metaphysical or abstract, are wholly free from intrinsic difficulty; but then, as some of them—in truth, the leading terms in the set—touch upon the structure and the working of MIND as it is distinguished from the animal organization, they therefore involve more than is known, or than will ever (it is probable) be opened up by scientific investigation. What we have now to do is nothing more than this—to disengage the metaphysical from the physical on this ground. We are not about to expound the enigmas of the Universe, but only to adjust and to put in order our own thoughts, and to place our terms in their true relative position each toward the others.

83. Correlative terms are such as draw their meaning entirely from their reciprocity, or their bearing one upon the others. Correlative terms present themselves, therefore, in *pairs* or in *sets*. Such are the words *whole* and *part*, a *half*, a *third* part; and such

are those many words and phrases which express our social relationships. The abstract words and phrases which are now in view are all of them correlatives: singly taken, they represent nothing; when packed together, they symbolize some fact or some congeries of facts, which we are to look for as belonging to the physical structure of the world of mind.

84. This set of terms includes the words *power*, *causation* (or cause and effect), *liberty*, *necessity*, *invariable sequence*, *freedom of the will*, and others of nearly the same import. If we would do away with some two or three of these words, or would declare that no distinguishable meaning attaches to them, we ought, in consequence, to reject the others also, or those which are their correlatives: if, for instance, we say that the words *power* and *cause* have no proper meaning in a scientific sense, then the balancing word, *necessity*, has also lost its value. And yet when, in this way, we have neutralized or have abrogated the two phrases, in the next moment we become conscious of our need of them. We have thrown away a part of our intellectual apparatus—our tools—and we must, by any means, recover the use of them. In such cases, what may be called the instincts of reason prevail over the specious sophistries of an hour, and we return with comfort to modes of thinking and speaking which suit us well, just because they are in harmony with the Mind itself, and because they have sprung out of itself spontaneously.

85. Let it now be supposed that we have been acquainting ourselves with the "mechanism of the heavens"—that is to say, the laws of the planetary

motions as they are taught by the modern astronomy —and that we have traced to their source, in the law of gravitation, all those perturbations which, at a first view, might seem to be lawless or fortuitous. In contemplating this vast and perfect scheme of balanced forces, amid the complications of which no real irregularity ever occurs—and while we are thinking of such a system, and are thinking of nothing beyond or beside it—we should not feel the need of any term whereby to affirm the unfailing constancy of the system, in contradiction to some imagined inconstancy or irregularity. There would be no room for the word *necessity* as applicable to these celestial motions, for we know well that there neither is nor can be any play of chance or fortuity among them.

86. But instead of the heavens, let me suppose that I am looking down into an inclosed garden at the time of the fall of the leaf: a huffing wind, thrown into gusty eddies by the adjoining buildings and the avenues of the place, hurls the falling leaves, as they are torn from their sprays, hither and thither in endless varieties of course. The popular apprehension of such a scene of confusion would be that Chance, and not Law, is mistress in this inclosure. But science will revise any such supposition, and will show me that the flitting track of each leaf, from the point of its detachment to the spot where at length it reaches its rest, is as truly and as constantly determined by law as are the movements of planets and satellites in their orbits. The difference is this: that in the one case the influences are such as we can ascertain and predict; in the other case they are too many, and they

are too intricately intermingled to become calculable; and we should certainly fail in the attempt to predict them, even in a single instance. Nevertheless, we can not doubt that the course of each leaf *might* be infallibly foreseen by an intelligence of a higher order than the human. An *earth-made* almanac foreshows, to an instant of any time future, what will then be the configuration of the planetary system, but a *heaven-made* almanac might place before us the future wintry bed of every leaf which is bursting the bud in May.

87. Let us now shift the scene. Instead of the unfailing movements of planets and satellites, and instead of the apparently fortuitous whirling of autumnal leaves—which we find is not indeed fortuitous, but is always in accordance with fixed laws—instead of these phenomena, we watch the fitful movements of a swarm of gnats disporting themselves in the summer's sun over a tranquil pond. We have here in view, unquestionably, a new element of motion; for the leaf, hurried before the blast, obeys impulses that affect it *from without:* it gives no indication of a force operating *from within itself.*

88. But the insect, although yielding itself more or less to the breeze, yet, in the main, describes a series of curves which obey a law derived from another source, namely, the volitions of the animal mind. These volitions, variable as they are, and taking their rise from the centre of this microscopic organization, defy our endeavors to predict them from one moment to the next. In watching these incalculable gyrations, we seem to catch a glimpse of a distinction between irresistible and invariable law, and a species of movement

which declares itself to be exempt from any such despotism: it is free. There comes before us, then, in looking at the animated world, the meaning of the correlative terms liberty and necessity, or any other terms which may be equivalent to these.

89. It is not until we give attention to this new class of phenomena that we find our need of abstract terms such as these. We should not think of applying to the celestial motions words expressive of their unalterable constancy if we had not already contemplated movements which *seem*, at least, to be free, to be inconstant, to be fortuitous.

90. But now, just as, in the instance of the flitting autumnal leaves, we found that we must reject our first supposition, that these frail bodies are driven hither and thither *lawlessly*, or as if by mere chance, must we not, in like manner, abandon the supposition which, at the moment, suggests itself in observing the sportive dance of the insect swarm? It may well be asked, Is there any solid ground for the distinction we have supposed to exist between the one class of phenomena and the other? Are not both alike ruled by law? Is the one kind of motion, in truth, any more free than the other?

91. We have already allowed this distinction to be real, so far as this, that the leaf is driven about by forces acting upon it from without, while the insect is carried to and fro by forces arising from within. Yet, is not this inner impulse itself as much necessitated as are the outer forces of the wind and of gravitation? Is, then, the distinction to be accounted real in a strictly philosophic sense?

92. In endeavoring to meet this question by looking more carefully into the structure and functions of animal organization, our first impression is likely to be that the distinction assumed is unreal, and the result of such an inquiry will be similar to that which led us to recognize the presence of *law* in the fitful course of the detached leaf not less than in the revolutions of the planets. We may not actually or certainly comprehend the purport and intention of the hither and thither movements of the insect, but nevertheless we believe that *he* knows what he is about. At the impulse of instincts which he obeys unconsciously and invariably, and also under the guidance of that knowledge of the outer world which he receives by the organs of sight, hearing, smell, and perhaps other senses with which man is not furnished, the animal goes, flies, crawls, runs, floats, and darts like ligthning, to the right or left, in obedience to those combined impulses of instinct and of sensation: these are laws as certain as gravitation, though they are far more various and complicated.

93. At this point, then, we might stop, and we may think our generalization is *sufficient* if it be not altogether complete. There will, however, remain a feeling of dissatisfaction in assenting to the conclusion that the distinction between the one order of physical agencies and the other is illusory. Here, again, the intuitions of reason make a protest against this sort of wholesale philosophy, and if we yield to it, it is still with a reserved dissent.

94. The grounds of such an intellectual revulsion are of this kind: animal instincts manifestly have in

view the animal well-being, the conservation of life; and they combine themselves every moment with impressions received through the organs of sense; and, as thus combined, they bring about a certain result, which is seen in the movements of the animal. Instincts from within and impressions from without are centripetal forces: they act in a radial direction, and meet in that organ—that centre of the nervous system whence volitions take their rise, and where consciousness is, or seems to be, seated.

95. Instincts and sensations are subservient to a definite purpose, or they are means which come to their end in some higher or more comprehensive intention. The action or movement of the animal which ensues reflects, not the instinct merely nor the sensation merely, but this final intention, in which both are combined. When, therefore, we have included in our generalization all the facts that belong to these two influences, instincts and sensations, there still remains something further or deeper to seek for—there remains this MIND-FORCE, of which the single volitions are the expression.

96. Any further question concerning this central power, which is the ultimate fact in the animal structure, must be carried forward on the ground of a purely physical inquiry, and it will come to be considered further on in our course. What we have now to do is to trace to their origin our own abstract notions, and to bring the terms which convey these notions into their true relative position. Whether it be so or not, when we go down into the depths of animal life, that the distinction between liberty and necessity is real, and whether or not all physical agencies are, in the

same sense, the product of irresistible forces—the results of laws that are uniform and invariable, yet it is certain that the human mind, unless in any instance its intuitions are sophisticated, challenges the distinction as real. Among those convictions which no sophistry can weaken longer than for an hour, this, of the *absoluteness* of that power of which our volitions are the result, is one of the most firm. The most subtile processes of logic still leave us in possession of the intuitive belief that MIND is free, *in some sense*, in which nothing else in the world is free; and that, whatever be the law of its action, it is a law differing essentially from physical law.

97. We go back, then, at present, to the set of correlative phrases which we have named above. All we have to do is to assign them to their positions respectively one toward the others. Which of this set of terms is entitled to the foremost place? The answer must be, that one term from which the others manifestly draw their value.

98. The English language offers to our use no word, appropriated to science, which should take this first place. We must use the word POWER, because we have not a better to indicate that primary element of our consciousness around which its other constituents take subordinate places. The word *causation* can have no meaning until we have allowed its full meaning to the word POWER, as the property peculiar to mind, and its true characteristic. We then bisect the abstract term *causation*, and so speak of cause and effect. The consciousness of power involves, or it includes, the notion of freedom or liberty as the condi-

tion of power. Power that is overpowered is not power. Power that is controlled in part is an admissible notion, and therefore it is that the word *freedom*, as applied to the human mind, is a term that has a variable value. Human minds are more or less free at different times or in different conditions. One mind has incomparably more freedom than some other minds; some appear to have none.

99. This primary element of our consciousness, which we are intending when we employ the word *power*, is entitled to the foremost place in this set of abstract notions; *first*, because the other terms of the set depend entirely upon this for their significance; and, *secondly*, because among them this is the one that draws its meaning directly from our consciousness, and which is able to stand by itself without support.

100. When we shall come to inquire hereafter concerning the structure of Mind as a subject of physical science, we may see reason to assent to this doctrine, namely, that MIND is the only *power* or force in the universe of which we have or can have any cognizance. In that case we shall be ready to grant that, in the scheme of the material world, as to all those "constant sequences," as they are called, and those invariable linkings of event to event with which physical science is concerned, the term *causation* can be applied to them only in a figurative sense or by a metonymy. This tendency to impute power or inherent force to the immediate antecedent of any event, and so to speak of physical causes and effects, is, in fact, a clear indication of the prerogative of the Mind itself, conscious

as it is of being the initiative power both within itself and as it is related to the outer world.

101. Uncultured nations, and, indeed, the ignorant and imaginative every where, are prompt to impute Mind, and feeling, and purpose, and power to all things material—animate and inanimate, and to suppose that a hidden soul is expressing itself in every event, especially in such as excite wonder or terror. Philosophy comes in to check, or to dispel entirely, these imaginary imputations, and to deprive the term *causation* of its meaning otherwise than as significant of the fixed sequency of events. Physical science is doing this more and more, and it must do so until this process of generalization comes at length to touch or to call in question the prerogatives of the world of Mind. When this happens, a strong reaction takes place, and then a challenge is made on behalf of those intuitive convictions which are anterior to formal reasoning, and which, therefore, have a hold of the intellect that is too strong to be much affected by logic, however specious it may be.

102. In recent times strenuous endeavors have been made to bring into doubt those instinctive convictions which are part of the constitution of the human mind, and which are the foundation of all knowledge, ordinary or scientific.

103. On the one hand, to reject these primary convictions because they can not be made good by reasoning, or, on the other hand, to attempt to establish them as theorems that are capable of demonstration, is to misapprehend the constitution of the mind. What can be done by means of that sort of analysis and rea-

soning which is called metaphysical, is simply this—to exhibit *the relative position* of those abstract notions which are the product of thought. The *absolute* value of the terms appropriated to those notions is not to be found, for *elements* are not to be analyzed.

104. It does not come, therefore, within the province of metaphysics to add any thing, even a particle, to our knowledge of the world of Mind. It has done its utmost when it has set its own house in order. If any genuine advances are possible on this field, they must be looked for on the path of physical inquiry.

V.

METAPHYSICS:

CONCRETIVE ABSTRACTIONS.

105. In the exercise of this same faculty of abstraction we may either, as in the various instances already mentioned, employ ourselves in setting off from some complex notion, one by one, its several constituents, until we arrive at that which admits of no further separation, or, otherwise, we may take up an abstract idea or a principle, whether it be of the simplest order or not, and then look about for the same idea or principle as it is to be met with elsewhere, imbodied under very different conditions, and combined with other elements.

106. Instances of this kind meet us at every step throughout the circle of the physical sciences; in truth, such instances constitute the staple of these sciences, and they are so abundant that they need not be

mentioned otherwise than briefly in illustration of what we now intend. The "laws of nature," as they are called, are, as to our mode of conceiving of them, certain abstract notions, which we recognize as we find them taking effect in a multitude of diversified instances.

107. Newton's falling apple suggested to him a "law," which he perceived to take effect in determining the revolution of the moon in her orbit, and then again to prevail throughout the planetary system. When the ascent of water under a vacuum came to be truly understood, the rise of mercury in a tube, under the same conditions, was seen to be an instance explicable by means of the same law; and then the heights respectively to which the two fluids will rise *in vacuo* were found to correspond to the specific gravity of the two as weighed against the terrestrial atmosphere, thus confirming the principle that had been assumed. Those innumerable analogies which are found to prevail between vegetable and animal organizations are instances of the same kind; as, for example, the several processes of nutrition, excretion, respiration, secretion, are found to be, *to a certain extent*, identical in principle; that is to say, a law, which, as we apprehend it, is not a reality any where existing, but is a pure abstraction, is recognized in this, in that, in many instances, which, at the first view of them, differ in many respects, and they so differ that it is with an emotion, first of surprise and then of pleasure, that we catch the identity which has been concealed, as we might say, hitherto, within the folds of many exterior diversities.

108. Abstractions of this kind may properly be called CONCRETIVE, because their tendency is to gather around themselves other adjuncts than those with which, at first, they may have presented themselves to our view. The human mind, when once its faculties have been pleasurably stimulated in this manner, eagerly goes in quest of these instances of *sameness* amid *differences*. The mind is never wearied in the pursuit of this ever-fresh intellectual gratification; this appetite of the reason meets no satiety in its indulgence.

109. As well in gaining possession of these concretive abstractions at the first as in pursuing them through all diversities of form, it is the same faculty that is brought into exercise as in the analytic processes which we have already spoken of. But now we find ourselves to be moving in a contrary direction, and we have also now another end in view.

110. Nor is this the only difference between the two mental exercises; for the state of mind which is produced by the one when it has become a habit of thought, is in utter contrast with that state of mind which is produced by the other when it also has become a habit of thought in the individual mind.

111. In following out, to their last stage, those processes which yield what we have called ultimate abstractions, we are, in a manner, driven forward by a stern impulse, which forbids our stopping short any where, so long as to advance another step may be possible; and when at length we reach that last position—a position on the very verge of the region that is accessible to the human intellect, we retrace our

steps with little of the feeling of having gathered any fruit, or of having in any sense enriched ourselves intellectually. In place of a pleasurable emotion of this kind, there has come upon us a gloom and the discomfort of having looked into an abyss—a dark void, where, if we were to plunge into it, a hopeless skepticism must be our portion.

112. Wholly of another kind is the feeling with which, after we have clearly apprehended some law of this concretive kind, we set out in quest of it, as it may be hidden beneath all kinds of outward dissimilarities. In this hopeful and fruitful quest we take a range through the ancient universe, and meet what we are in search of at almost every turn. The feeling is that of acquisition, not of loss; a feeling of confidence, not of diffidence; of sure belief, not of skepticism.

113. In those departments of science which are observational and experimental, *we find* what we are seeking for; in those which are inventive and constructive, we *make* what we are seeking for. In chemistry, for example, we *find* the law of definite proportions in the combination of elements. In mechanics, when its principles are apprehended, we create the applications of them in such forms as may suit our purposes.

114. It is the perception of *difference* that first awakens attention, and which attracts the eye and stimulates the mind; but then it is the perception of *sameness*, or *identity*, that leads it forward, as if by a charm. The two perceptions alternately taking effect, constitute the fascination of the philosophic life. This, however, is a subject that belongs to our after course.

115. The sameness or identity which has presented itself as an abstract notion tempts us to look for it elsewhere among diverse forms, or to give effect to it in other modes, and it is thus that it becomes concretive.

116. For instance, in making use of a lever for uplifting a heavy mass, I find that I am in command of a great advantage—I am using a *power*, as I am tempted to call it, without the aid of which my utmost strength would be insufficient to produce the desired effect. But whence comes this advantage? Is there, in fact, any power—is there any vitality in this iron rod? This is not to be supposed. I find, or I am taught, that the helpful property of the lever results simply from this—that by lodging it upon a solid support very near to one end, I am able to bring about a compromise between space and time. I spread the muscular force over a large space as compared with that space within which the other end is to take effect. Here, then, I have before me, in this compromise, a principle which I conceive of abstractedly; and now, putting out of view the lever and the adjustments for applying it, I go on to inquire whether the same principle might not be brought into use under, perhaps, very different conditions; and so, in fact, it is, in what are called "the mechanical powers."

117. The lever and the screw are engines which, to the eye, are wholly unlike, and so are the wheel and axle, and the wedge, and the inclined plane, and the pulley, which yet are one as to their *reason*, though, to make them available for mechanical purposes, they are different in form and structure. To the unin-

structed these appliances may seem to derive the power which we impute to them from wholly different sources. It is only when instructed that we learn to trace this supposed power to its one origin in the same law of compromise.

118. The more thoroughly and distinctly we gain possession of any such law in the form of an abstract notion, the more likely are we to use it *concretively;* that is to say, to give it expression, and to *realize* it, under some hitherto not-thought-of conditions. This abstract conception of the law which takes effect in the mechanical powers—the lever, the screw, and the others, when it comes to combine itself with the law of fluids as to equal pressure in all directions, leads to the idea of the Hydraulic Press, which, at the first view of it, may appear to derive the enormous force it places at our command from some hidden power which must be altogether new, and which must differ *essentially* from that of the lever and the screw. But we find it is not so. The abstract idea prevailing in each of these instances tends to bring itself out in these and other modes, and thus it becomes concretive.

119. As we may gain power by extending the space through which the first moving force acts — for instance, in the lever, when it is used as above mentioned—so, to suit other purposes, we may gain speed by a sacrifice of power, as in that sort of lever of which the oar is an instance; and such, too, is the human arm, and the legs of quadrupeds, and the wings of birds, and the fins of fishes; and such is the paddle-wheel of the steam-boat. The principle is one, the adjuncts and applications are various.

120. But again: Mass and Velocity give Momentum or force, derived from the *vis inertiæ* of matter, and this force may become prodigiously great. Thus it is that a hammer, wielded by a feeble hand, drives a nail into an oak board which the strongest arm would not be able to push into it. Look at the steam-hammer; or see what is done when the point-blank fire of heavy guns is effecting a breach in a granite pier. The idea of force thus obtainable for mechanical purposes, by giving a high speed to a mass of solid matter, becomes the fertile source of almost innumerable contrivances; and it does so *concretively*. Might not this principle be applied even to a soft substance if a speed proportionately great were imparted to it? It is so when an inch of candle is fired from a gun, and actually passes through a deal board.

121. A body in falling, that is, when acted upon by gravitation, acquires speed, constantly increasing the farther it falls; and thus it gets force—force enough to carry it up again near to the level from whence it had started; so that if a little more force be added to it from some other power, this addition will suffice for carrying it quite up to that first level, and thus the fall and the rise may be repeated forever. So it is that the bob of a pendulum oscillates, performing the same journey through space again and again, only supposing that, at the point of each return, it receives a little additional impulse from the weight or the coiled spring, just enough to make up for what it has lost from friction and the resistance of the atmosphere.

122. But we may draw instances of the concretive process from a very different field. The conceptions

we entertain of moral qualities are abstractions merely; nevertheless, they are, or they may be, perfectly distinct, and they are such that we easily recognize them under all diversities of circumstance in the conduct and behavior of those around us. What is Generosity, or Patriotism, or Self-denial? what is Avarice, or Pride, or Cruelty? As to these distinctions in temper, feeling, conduct, action, we need no instruction for discriminating them; we need no carefully-worded definitions to prevent our taking one for the other; we need no scientific analysis of their constituents to place them in our view free from uncertainty. As often as a certain line of conduct or order of temper comes before us, a perfectly definite idea is suggested to us, and an emotion is excited, which varies very little merely in accordance with the particular circumstances that may have attended the occurrence in question.

123. But now, as to these definite moral abstractions, how do they come to be concretive? When one such notion—say that of self-denying beneficence—has lodged itself in the mind, and has become a centre or a nucleus of the moral sentiments in the individual, it suggests such courses of conduct as shall imbody it. Or let us take an instance which may be less open to ambiguity. The author of a fiction—whether it be a drama, an epic poem, or a novel—takes to himself, as his guiding principle, some one or more of these moral abstractions, whether on the side of virtue or of vice, and then he invents occasions and imagines circumstances which shall be fit for calling forth this quality and for giving a characteristic expression to it. In this manner the notion concretes itself; and it does so

in all conceivable modes until it has run itself through the history of a life: it makes itself the *one reason* of a man's fortunes or of his misfortunes; it is the solution of every enigma in his behavior amid that current of events which have given variety to the story.

124. But now it is evident that we may either take up an abstraction of this class, and then employ ourselves in gathering around it its suitable adjuncts, its fitting circumstances, and its manifestations, or we may place before us some such actual assemblage of adjuncts, enveloping or expressing a single abstract idea; and then, looking at the concrete as a *whole*, we may examine and criticise the work, and we may come to the conclusion either that all the parts are what and where they should be, or else we find fault with the artist as one who is unskillful in his line.

125. Now from this source—from the examination of a concrete mass—when all is found to be in harmony, and when the parts cohere perfectly with each other, and when every thing is in accordance with the ruling idea of the whole, we receive a pleasurable and lively impression, and which we speak of as arising from the sense of FITNESS and ORDER.

VI.

METAPHYSICS:

THE SENSE OF FITNESS AND ORDER.

126. THIS, whether or not in strictness we should call it an instinctive feeling, has in fact been regarded as an elementary constituent of the human mind. The

question whether it be so or not does not belong to this stage of our subject. But the sense or feeling itself has a direct bearing upon metaphysical speculations, which we must not fail to take account of, and which requires it here to be brought forward.

127. Great stress, and very justly, has been laid upon this instinctive feeling in the momentous argument concerning the grounds of Abstract Theology. In this place all we need do is to show in what way it may serve to restore that equilibrium in the mind which is liable to be disturbed in the course of an exclusive attention to metaphysical abstractions.

128. We have just now supposed there to be in our view some aggregate—some mechanism or some organization, in which various adjuncts surround, and combine to give effect to, a law—this law being, in that case and for that reason, a concretive abstraction.

129. What we are here in search of is ONENESS and *singleness of intention*, and we are to find it as a centre toward which the parts converge, so that each adjunct is seen to draw its reason from this one governing idea.

130. In setting out upon such a quest, we must distinguish between the *fitting of parts* one to the others, and the *fitness* of parts in their relation to the whole, of which they are the constituents. In the first, these parts may be more or fewer, indefinitely; in the second, no supernumeraries should have any place.

131. The fragments of a quarry of glass or a china plate are before me in a confused heap. By some painstaking I succeed in finding the neighbor pieces to each of these fragments, and at length I dispose them all precisely as they were placed in the unbroken plate.

This is only a fitting of parts; but if the plate at first were a perfect circle, or an oval, or a hexagon, then, if this geometric figure be taken as the rule, or as the law which is to determine the place of all the parts, it leads me not merely to take care that edge fits edge every where, but that, when at length all the pieces have been so fitted, they may make up the figure, the circle, or the oval, or the hexagon, in accordance with its original contour. If it be so, then all is *right;* and this word *right*, which I thus instinctively employ, means this, that the fragments, whether they be a dozen or a hundred, have now become ONE. Together, they realize the abstract idea of the original plate; they are what the maker of it intended.

132. Let the fragments before me be those of a vase decorated with wreaths and figures. The broken and scattered pieces must be brought to fit one to another: this is the first condition of the process; but when they are so fitted, the contour of the vase must be satisfied; for, perchance the fragments in hand have belonged to two vases, differing in outline; but then the aggregate would not constitute a *whole;* or, perchance, these pieces are parts of two vases of the same form and dimensions; and although, therefore, they might be made to fit, yet the decorations upon them would not agree—the artist's idea would not be brought out. We must, at the last, see before us a *oneness* in all respects, or, if we can not effect it, we must abandon our task as impracticable.

133. But if, indeed, all be right—if the fittings be exact—if the contour be true, and if the painted decorations be complete, then we contemplate the whole

with a feeling so lively that it may be called an *emotion;* it is a vivid consciousness of truth and reality. Such is the constitution of the human mind that it comes to a rest, with satisfaction, whenever it is able, in this manner, to bring dissimilar or disjointed objects to accordance and to unity.

134. In following this sense of fitness through various instances, we may see how strong a hold it has upon the reason and upon the primary instincts of the human mind; in fact, this hold proves itself to be immovably firm; and we shall find that it affords an effective means of counteracting that tendency to universal doubt which belongs to, or which follows in the track of purely abstract speculation.

135. In proportion as the intellectual faculties are predominant, and if they be also in a healthy condition, the tendency is strong to simplify, and to reduce things to classes, and to generalize—all which processes, though they differ according to the objects to which they relate, are in substance the same: they are the several methods by means of which differences, however many, are brought to a *oneness*, at least as to the mind's apprehension of them. At each stage of such a process, and as often as things which had appeared to be irreconcilably unlike and dissonant, or contradictory, are brought into relation one to the other on some harmonizing principle, there takes place a consciousness of satisfaction—a rest, as if at length we had set foot on firm ground.

136. When any one who is highly gifted with the faculty of order enters upon a department wherein confusion has long ruled, mixing and confounding all

things, his task—hopeless as at first it seems, and intolerably laborious—quickly affords him so much of this instinctive pleasure that he commences each day's work with more and more alacrity: that which had appeared as if it must forever defy his skill and industry has already submitted itself to his reason—it has yielded to a law of arrangement; and at every step that is made on the road of order, the next step has become more easy, and it is more agreeable.

137. We take an instance of a different kind. The works of a clock—the wheels, the pinions, the barrel, and cord and weight, the pendulum, the bell, the striker, and the rest, with the wooden framework and supports, are confusedly put before me. I am not told what is the intention of the machine of which these are the parts, nor do I know how they should be put together. To make my way through this mass of details, I take up the pieces at random, offering them one to the other, to ascertain which of them may be made to fit or to work together. At length the parts of the machine become *grouped*, two, three, or more together. These groups are then conjecturally assorted; and after a while, as each successful adjustment indicates another, the machine has become one—the parts constitute a whole; and the feeling with which I survey the result of my labor is nearly the same as that with which I had looked at the restored vase.

138. I then use the winch: the cord is wound upon the barrel; the weight is at its limit of height; but all is motionless, and, so far as I can see, it is purposeless also. But by accident I jog the pendulum, and instantly it is as if life were breathed into this congeries of

brass circles: all is now at work; and this spectacle of accordant rotation awakens a new feeling of satisfaction. There is before me not only a perfect fitting of parts, but a *fitness* of all the parts—not one excepted—to promote this tranquil and uniform scheme of revolution; and, moreover, beyond this fitness there is order, for there is a series of adjustments, as well as a collocation of them. The hands, for whatever purpose, traverse the figured dial, the one at twelve times the speed of the other. At equal distances, as measured and figured on the dial, the bell is struck, and it is struck as many times as the hands have made revolutions, or have traversed equal parts of the circle.

139. Let it now be by chance that I notice the agreement of the motions of this machine with the diurnal revolution of the earth: the machine I find to be in accordance with the planetary mechanism, and thus its purpose becomes manifest. The perception of this purpose awakens a new feeling, or it greatly enhances that which had already been excited. I now look at the machine as ONE in regard to the structure of its parts, and it is ONE also in respect of the equable movement which ensues when its moving force is brought into combination with the counteractive movement of the pendulum; and beyond this I find it to be ONE in respect of its ultimate intention or final cause; and this intention is in harmony with the mechanism of the heavens. A worthy intention, well and perfectly secured! and it yields me an aid that is inestimably important in the distribution and allotment of my labors through the day: itself it is a symbol of order, and it is the source of order to those whose servant it is.

140. To note and to take account of differences is the first instinct of reason; to note and take account of a sameness connecting such differences, and reducing them to accordance, is the second instinct of reason. When the one duly follows the other, reason comes to its rest, or to its state of acquiescence; and this rest takes its character from that condition of the mind to which, at the moment, it happens to be opposed. For instance, it may be opposed to confusion or distraction; it may be opposed to the sense of contrariety, or incoherence and incongruity; or it may be opposed to doubt or to disbelief.

141. To each of these antagonisms this rest of the intellect brings relief, or it entirely composes them. Our present purpose is to show in what way the acquiescence which is obtainable from the sense of order and fitness affords a true and valid counteraction to the disquiet and the skepticism which are the fruit of metaphysical speculations, when such speculations have engaged the mind in an exclusive manner for a length of time.

VII.

GROUNDS OF CERTAINTY IN RELATION TO METAPHYSICAL SPECULATION.

142. As to any of those instinctive convictions or assumptions which are the basis of our intellectual structure, and from which all reasoning must take its start, it would be a mere solecism to ask for *logical proof* of their certainty. No meaning can attach to

the words in which such a demand might be conveyed.

143. Propositions that are indeed susceptible of logical treatment for the purpose of establishing them as certain will always contain two or more ideas, the connection between which may be shown to be such as is therein affirmed, or the contrary; but an intuition or an instinctive conviction has no constituents; it has no parts; there is nothing in it that is complex, or that implies any sort of interior relationship.

144. We *believe* those things which may be shown to be certain or to be probable by exhibiting their inferential connection with some other thing that has been assumed as indisputable, and which is anterior to the matter in question. But these intuitions, by the very terms in which they are conveyed, can have nothing anterior to themselves, nor can they ever come before us in the form of inferences that are logically valid. Why do you believe your own existence? There can be no room for a "why" in this case: the *cogito*, ERGO *sum*, is a mere quibble; it is an unmeaning play upon words.

145. But is this the fact, then, that, as to the certainty of our knowledge, and as to the foundations of human reason, we must be content to float over an abyss into which we dare not look, and concerning which we must ask no questions? It is even so in one sense, but it is not so in another.

146. We must have misunderstood the structure of the human intellect *as an engine of thought* if we have set it to work *frontwise* toward the elements of knowledge. In like manner we should misinterpret Nature

if, instead of digesting *food*, we should labor to digest *elements*. It is the practice of engineers, in drawing the plan and elevation of a complicated machine, to put arrows here and there upon the rotatory parts, in order to show the *direction* of the movement, where else it might be misunderstood. We must not set the wheels agoing as from the product toward the power, but as from the power toward the product.

147. After all, then, and at the best, is there no *certainty* to be obtained in the region of mental science? Must we be content always to take things for granted? Is it in the department of mathematical science alone that absolute knowledge or full assurance is to be looked for? If it be so, our prospects are gloomy.

148. On what grounds do you rest this implied distinction between mathematical and mental science? You will find there is nothing valid in any such distinction. Mathematical demonstration is a process of reasoning which always flows in the descending direction: it commences with principles anterior to which there is nothing that is susceptible of proof; these must be simply assumed; you must submit to take them for granted; and you must do this, not because there is nothing mysterious and perplexing imbedded in mathematical axioms—for there is—but because the human mind is furnished with no solvents for digesting these elements. Give it any sort of combination, and it will analyze it, and then go on.

149. Alike—precisely alike—in mental and in mathematical science, assurance—certainty—demonstration, and a perfect conviction of truth and reality, are to be obtained *among the products of reason*, but not

higher up than that level where these products begin to appear. The difference as to *certainty* between mental and mathematical evidence belongs to the means employed for the notation of the process and of the conclusion arrived at. We may arrive at certainty in the one department as surely as in the other; but in the one case we possess the means of noting what we have done to-day, and of finding it to-morrow, or a year hence, just what and where we left it; in the other case—more or less so—we are compelled to retrace our steps as often as we would recover *precisely* our former position.

150. Practically, then, what is our resource? There *is* a resource, and it is such that, unless the individual mind is ill constructed, or has sustained damage from some mistaken treatment, it abundantly subserves its purpose. We find what we need in that sense of FITNESS and ORDER of which just now we have spoken.

151. When proof is demanded of that first of all certainties, our own existence, it appears that the most valid answer which we can give—if it must be given with logical formality—is nothing better than a quibble—*cogito, ergo sum.* We may well call this grave pretense of demonstration a quibble; for, as soon as I come to attach any distinguishable meaning to the *cogito*, I have laid hold of whatever may be contained in the *sum*, and *vice versâ*. The *ergo*, therefore, can express no inferential dependence of the one term upon the other.

152. If, then, I can not logically establish the certainty of my own existence at this passing moment,

when, with the most confidence, I believe myself to exist, how can I furnish any such evidence of my existence in time past, or how prove my continuous personal identity through the lapse of years? Why should I believe this imagined recollection of the gone-by time—these days and years past—to be any thing more *real* than so many phenomena, making up together the one phenomenon of my existence at this moment? They may be so, and nothing more; and if the *containing* phenomenon—the *now* existence—can not be logically vouched for, then we must of necessity abandon the *contained* phenomena—the past—as a surmise only. If so, then, as to the entire notion of personal existence and continuity of being, we must, it seems, humbly crave indulgence to retain it as a matter of convenience, but to which we can advance no legal claim.

153. Those who have not done themselves the justice to peruse certain books of a profound class may well be excused if they should imagine that reasonings of this order could never be seriously advanced or pursued by any but the insane. Yet it is not so. He who persists in the endeavor to push forward after the abstractive process has reached its end, can do nothing but exhibit himself whirling in an eddy where he loses his hold of common sense.

154. Let it for a moment be imagined, not that we should attempt to make good by logic that which logic has no power either to establish or to impugn, but that the reality of our continuous consciousness, and the faith we have in our personal identity, through a track of time, were allowed to need correlative con-

firmation, or to admit of some attestation for its better support.

155. In showing whence any such confirmatory evidence might, if indeed it were needed, be drawn, it must not be imagined that we have any object in view beyond this, namely, to exemplify a method of which some use may be made hereafter on occasions where a degree of ambiguity may be admitted to present itself.

156. Let, then, any one imagine that he retains a perfect recollection of the dreams of the past night, and, moreover, that he remembers the dreams of the nights of many weeks or months. In this case he will have in his view, as we might say, two masses or bodies of continuous being, or two consciousnesses, and then, with the two outstretched and distinctly in prospect, and which, though similar in their elements, differ very much in their characteristics, he may ask to which of these two series shall he attribute reality, and of which shall he affirm that it is *true*—not merely true in so far as his consciousness is concerned, but true *objectively*, and *real* also, in its bearing upon the outer world and upon other men? They are not both true alike, for in various particulars the two contradict or exclude each other; if the one series be true, the other must be false. Or shall he deny reality to both alike?

157. We must decide between the dream-life and the day-life in some other way than by giving our confidence to that one of the two which always asserts its own reality. However strange or monstrous a dream may be, we do not, while dreaming, question its reality; we passively accept it as real; and hence the

liveliness of the pleasure which attends the moment of awaking from a distressing dream—the phantasm is "only a dream!" But now it has happened to many in the course of years, and on occasion of some new and agitating event, to doubt, for a moment, the reality of what is taking place around them, and they exclaim, "This must be a dream; it can not be true; am I sleeping or waking?"

158. Here, then, we have before us—and they stand as rival claimants to our confidence—the two halves or two distinguishable constituents of our entire consciousness; here is the dream portion and the (so called) waking portion; dream-life and day-life are litigants in the court of consciousness. As to the one, *while it is present*, we never doubt its reality; but as to the other, we do sometimes call it in question. Why, then, should we give judgment against the uniformly confident party, and give it in favor of the party which actually falters sometimes, and which, at moments, we are inclined to disallow? Am I *certain* that I am not, in this instance, taking up the unreal and rejecting the substantial?

159. The grounds of this constant judgment are obvious. If I take up the successive dreams of only a single night, I find them much to resemble so many fragments picked up at random from a heap of broken potteries: there may, perhaps, prevail throughout the mass a certain tone or color, whether sombre or gay, but I can not bring them to fit, edge to edge, in any way; the fragments have no continuity; or let me take the dreams of Monday night entire, and endeavor to join them on to the dreams of Tuesday night, and

so labor to weave the week's dreams into a continuous fabric. This can never be done; there is no splicing of such fragments; there is no cohesion between them; there is no *oneness.*

160. But, on the contrary, however strange and unlooked-for may have been the Tuesday's events, Tuesday fits on to the Monday, its predecessor, and we find it is even now fitting itself on to Wednesday. The day portions, though they are severed always one from the other by the intervening periods of dream-life, yet do they invariably coalesce; they melt into a congruous mass; they gather coherence as they flow forward; the diversified experiences of days, months, years, lodge themselves in the consciousness as *a whole;* and although the earlier and the more remote portions of the series are becoming less and less distinct, yet, as often as we turn the eye toward them for the purpose of retracing their connection with what has followed, we find we are able to do so, and thus, from time to time, we reperuse our personal history, and we do so with an undoubting assurance of its reality.

161. This confidence, this perfect assurance, is a result of the structure of the Mind. It is not, in any case, through a circuit of inferences, or by linking together propositions, that we are induced to accept as true and real that which bears upon itself the characteristics of coherence, congruity, fitness, order. It is with an instantaneous and involuntary confidence that we do this. In the case which has just now been imagined, the dream-life, unless the mind itself were bordering upon insanity, could never stand a moment's

competition with the waking life, as though it also might pretend to be real: it is fragmentary, incoherent, and non-continuous.

162. But even this, though a sufficient ground, is not the only ground of its rejection. Mind, as to its primary element—the one element which is its first characteristic—is Power. Power is more or less in act at different times and in different minds, and in every mind it is subject to seasons of quiescence—it is in abeyance. In perfect sleep, the Mind, as to its power, is wholly quiescent; it has thrown the reins from the hand; its control over the voluntary muscles is abrogated; and so is its control over itself: it lies prostrate; it is the victim of whatever phantasms may hurry across the field of the passive consciousness; and it may suffer intensities of anguish while it is in this helpless condition.

163. But if "the night cometh, so also the morning;" and at the moment of awaking we gladly throw off from us, as no parts of ourselves, these shams of real life, whether they may have been gay or sad. And why do we do so? Because the Mind, in respect of its primary element, has had no part in these transactions, and can not be called to account in respect of them: it has not been the *Ego* that has so spoken or that has so acted. No adhesions at any points have had place between the mind and the scenes, the persons, the events of the dream; all is to us as though it had not been, and the sooner it is cast off and forgotten the better.

164. We gain, then, an assurance doubly sure of the truth and reality of our conscious day-life when

the sense of fitness, order, and coherence comes to conjoin itself with the consciousness of power, mixing itself intimately with those elements of consciousness in relation to which the mind is only passive.

165. It is in another kind of way that the interaction or the inter-relationship of power and passivity in our consciousness gives us the irresistible assurance of truth and reality when we have to do with beings like ourselves around us.

166. When I believe myself to be conversing with others like myself, listening to them, replying, confuting their opinions, pleading for my individual interests as opposed to theirs, why may not the whole resolve itself into so many phenomena of my own consciousness? In fact, have there not been hours of reverie in which such disputations have had place in my mind, and which I have acknowledged to be of home manufacture? Why may not *all* be products of the same inventive faculty? Let it be granted that, logically, we must fail in absolutely excluding such a supposition.

167. In fact, no hypothesis of this kind ever lodges itself in the Mind as if it were entitled to a place there as probable. Why it does not is easily understood. In the first place, the parts that are severally acted, the opinions that are professed, and the modifications which these undergo, as related to our own acts and opinions, are all separately coherent, and they are adhesive, part to part, and also one with the others. They are not fragmentary, as are the dreams of a night; they are explicable on the hypothesis of their objective reality, but not otherwise.

168. But, in the second place, as in the succession of dreams we take no part voluntarily, or in the exercise of power, and therefore reject the whole when we awake because it is *not of ourselves*, on the contrary, when we have to do with others, we not only bring ourselves into coalescence with the succession of events by exertion of our own power, but we meet another sort of evidence of the objective reality of the encounter in the antagonism of a will which plants itself athwart the path on which we would fain advance. The reality of the Mind-world, in the midst of which we are placed, is thus trebly vouched for: *first*, by its coherence and its internal consistency; *secondly*, by its immediate relationship to that which is the essence of the Mind—its own controlling force; and, *thirdly*, by the contrariety of forces, or a resistance which we can not overcome, and which, intuitively, we attribute to a will foreign to our own, and as real.

169. It should be well understood that the ground of confidence in all these instances is not that of a process of reasoning, shutting us up to a conclusion which we can not reject, but it arises from the structure of the Mind, which yields itself involuntarily to the conviction of truth whenever it becomes cognizant of fitness, order, coherence, and unity of intention. This conviction combines itself with the consciousness of its own inherent force. Thus it is that when the Mind acts in relation to what is coherent, it does not need to persuade itself of the reality of what it has to do with any more than it does of the truth of an axiom in geometry.

170. In speaking of those mixed abstractions (from

80 to 99) which are conveyed by the words *power*, *causation*, *liberty*, *necessity*, and the like, we arrived at a conditional conclusion, which was to this effect: that although there might seem to be reason for rejecting our first impressions as to the liberty of animal volitions, and although we might, by a sort of force, yield to the doctrine of universal physical causation, as prevalent alike in the worlds of matter and of mind, yet that an instinctive conviction—stronger than logic, because anterior to it—rebels against this belief, and brings us over, again and again, to a very different persuasion.

171. Let it be granted that, in those modes of formal reasoning which are assumed to be infallible, it may be made to appear that the revolution of planets and satellites in their orbits, and that the whirling of autumnal leaves in the wind, and that the gambols of insects in the summer's breeze, and, not less certainly, the volitions and actions of men on the great theatre of life, are determined, and are predetermined, irrevocably and fixedly, under the domination of physical law—law taking effect whether it be upon masses of matter, or upon animal organizations, or upon minds, and this in such a manner as to forbid our allowing room for any distinction, in a philosophic sense, between any one order of sequences and any other order.

172. All this may be alleged, and it may be expressed in the style of demonstrative reasoning; and it may be said that none ever resist this sort of generalization unless it be those who are wanting in the logical faculty, or those in whose minds vulgar prejudices prevail over scientific accuracy.

173. It is much in this way that the materialist treats the belief in Mind as something more than a secretion from the brain. It is in this tone (or nearly so) that the spiritualist, on the other side, contemns the hypothesis of an external world as a material reality, a something existing beyond and independently of the mind. It was in nearly the same mood of logical imperiousness that the Aristotelian system of the heavens was affirmed to be what the modern astronomy has proved that it is not.

174. Reason—drawn out in propositions, and these propositions syllogistically packed together according to rule—as it avails nothing in opening up the mysteries of nature, so is it equally powerless either in establishing or in refuting those intuitive and involuntary persuasions which, in all cases, are and must be taken as the ground of reasoning.

175. What that distinction may actually be which should forbid our confounding material causation—gravitation, chemical affinity, magnetic force—with animal causation, or the volitions of Mind, is a physical inquiry, in pursuing which the method of reasoning by syllogism is a sheer illusion—it is a pedantic frivolity. This *physical* question, we need scarcely say, does not belong to Metaphysics. But what we are intending is this: to show the path on which certainty is attainable in subjects embraced in metaphysical speculation, even independently of any physical investigation.

176. When we bring into question the volitions of Mind, such as we find them developed through the medium of the animal organization, and also as these volitions belong to our consciousness, the alternative

is this: we may affirm, as above stated, that, in a strict and philosophic sense, there is no difference between these volitions and the fixed sequences which are taking place in the world of inorganic matter; that is to say, no difference in respect of their uniform subjugation to law—law, in relation to which matter and Mind alike yield to an established scheme of causation anterior to itself. This is one doctrine.

177. Another belief, and which remains as our alternative, is this: that the volitions of MIND differ from physical sequences in some absolute, though it may be inscrutable manner; that laws, such as those of gravitation, chemical affinity, magnetism, vegetative growth, and animal life (considered as organization merely), do not take effect within the world of Mind; or otherwise worded, that MIND is free in a sense, whatever it may be, in which nothing else in the universe is free. As we have affirmed that Mind is the only power (known to us directly), so we say that it is the prerogative of Mind, and of Mind alone, to be free.

178. But if we are to make our choice between these two doctrines, on what ground shall we proceed to do so? The first of these beliefs is recommended by its apparent simplicity. There is no causation, we are told, but physical causation; the notion of liberty, in any sense whatever, is a popular illusion. Given, in any case, the instincts or the dispositions of an animal, whether it be man or his fellow-brute, and then tell us what are the circumstances that surround him at any moment, and we may predict the volition and the act as surely and as invariably as we do the fall of a stone, or the curve of a projectile discharged from a cannon.

179. Besides, it is alleged that any other supposition, founded on the imagined independence of the Mind in its volitions, is inconceivable. Not so the belief that a volition is precisely a resultant line; that it is the product of two forces, meeting as from different directions; it is a diagonal, which indicates the relative intensity of these two forces, namely, the instinct or disposition, and the present circumstance, which is the immediate inducement. If it be so, then it is certain that physical necessity rules the universe: the universe is a machine, all of one order.

180. Why, then, should we go in search of any other doctrine, if this suffices? Are we likely to find one that is more complete or coherent than this? Is it not a generalization that embraces all the phenomena, and that brings to an end, or resolves, many perplexing questions? So it may seem; and yet the question returns upon every unsophisticated mind, *Does* this doctrine indeed embrace all the phenomena? and *does it* consist with those instinctive convictions which are anterior to reasoning? We think not. To this seemingly philosophic generalization we give way, it is true, for an hour, because we do not find ourselves provided with a logic which can overthrow it; but just as it is with the hypothesis of the non-existence of an external world, so with this: the moment we go forth into the open air, we reject it as a sophism—we spurn it as a cobweb—"reason or no reason, *it is not so.*"

181. But what is there which we may oppose to it? In the first place, it must be granted that this doctrine is a precarious philosophy; for if, within the vast range —if in the immensity of the world of mind there should

present itself so much as one fact, or let us say one class of facts, which resists the endeavor to bring it under the conditions of fixed physical causation, then the theory must be abandoned; for then, and in that case, MIND must be held to differ essentially from all other things.

182. Newton held his theory concerning the law of gravitation in suspense, and he abstained from affirming it so long as there was room to question what was the figure of the earth, whether oblate or prolate, or so long as the moon's motion in her orbit was not fully determined. On similar grounds we ought to know *every thing* that belongs to the world of Mind, and to have acquainted ourselves every where with its illimitable developments—below us and above us—before we can warrantably affirm that Mind and matter are subjected to law in the same sense.

183. We shall not fail, while giving attention to the development of volition in the animal orders around us, to gather the belief (whether we are looking for it or not) that there is, at the centre of the animal organization, a Third Principle, to which the organic sensations of the outer world on the one side, and the instincts or appetites of the animal on the other side, stand evenly related. Animal action indicates, even if it be obscurely, a third element, differing from and independent of the other two.

184. But when we come to contemplate the great world of human volition, and when, in an involuntary manner, we interpret the phenomena of this world by means of our individual consciousness, the persuasion comes in upon us with irresistible force, that MIND

possesses a prerogative as to its volitions which distinguishes it, not in semblance, not so as if it were a difference in *degree*, but utterly and essentially, from every catenation of causes and effects in the material world. Just as we believe (with or without the leave of philosophy) that there *is* a real and objective world, in the midst of which we are placed, so do we believe (if sophistry be not listened to) that MIND is endowed with an independence, a sovereignty, which constitutes the very ground of the distinction between itself and the material world.

185. In the region of metaphysical abstractions we find, not indeed direct evidence, but an indication of what is here assumed to be the distinctive prerogative of MIND.

186. On every track of thought within this region, the human mind goes forward, as if the tendency to do so sprung from its own structure, toward UNITY. In analytic thought the process is continued until an element is arrived at which admits of no more analysis. In the process of generalization the mind comes to no rest, and does not acquiesce in the result of its labors until the comprehension of many constituent principles or of a multitude of facts has brought them into a single point of view. All phenomena must be reduced to a radial adjustment; they must combine themselves as related to a centre. Science confesses itself incomplete until this has been done.

187. As, in relation to its processes, the human mind thus goes on in search of unity, so, as to its own consciousness, does there prevail the same tendency to gather itself up and to throw off whatever is not *of*

itself—whatever, for a time, may have drawn it aside; and this tendency (certainly it is so in the most vigorous minds) takes effect not merely as to impressions received through the senses, but as to its own instincts —and its individual inclinations—and its impulses, of whatever sort they may be. MIND centralizes itself, and it is disquieted until it comes to its rest in doing so.

188. It ought not to be pretended that facts of this kind are *conclusive* in relation to the question which is now in view, for it must be granted that they are susceptible of explanation on the hypothesis which we incline to reject. But this may be said, that they consist much better with the one of these assumptions than they do with the other, as thus:

189. Let the instincts, appetites, habits of the animal—whether man or brute—be comprehensively represented by the letter A; then the letter B will stand for the inducements or the circumstances which at any moment are the immediate occasion of a volition or action, and the letter C stands for that volition or action.

190. Animal action, according to the first hypothesis above stated, may thus be formulated: it is, $A \times B = C$. But in this case, although C is *one*, if it be thought of in its relation to A and B, which have concurred to produce it, it is not ONE *in itself*, for it is a product only; nor does it represent, nor can it be understood to symbolize, that consciousness of unity which declares itself to be a primary characteristic of Mind.

191. But if we adopt hypothetically the belief that Mind is a simple principle, which connects itself with instincts and dispositions accruing to it in consequence of its alliance with animal organization, and, as thus

furnished, is acted upon by circumstances that are exterior to itself, we need not allow to either of these forces a sovereign influence, and we reserve for MIND its essential unity, and with its unity its sovereignty.

192. But how might any such hypothesis as this be set forth in a series of intelligible propositions? We do not here ask how this might be done; but, instead, we find, among the firmest intuitive principles of human nature, one instinct which so coalesces with *this* hypothesis, and which so reluctates to coalesce with its rival, as may well avail to abate, or entirely to override, the merely logical perplexity which stands in our way.

193. The MORAL SENSE cleaves to the human mind as an element that is inseparable from it. The notions, the emotions, and the various sentiments which float around this consciousness of moral good and evil—all these ingredients of human nature are recognized in our inmost convictions as part of ourselves. The moral sense may indeed have become perverted, or it may have been set in a false direction, or it may have lost its vitality; and, as is the case with other faculties (the abstractive, for instance), it may be blunted, enfeebled, and apparently dead; but no such exceptive instances avail at all for bringing into doubt the reality of this principal element of human nature.

194. The idea of responsibility and the recognition of law—not of physical law, which enforces and vindicates itself, but of law sanctioned by an authority above us, and which is to be vindicated at some future time, this idea and this recognition follow us when we would run from them; they meet us ever and again

on our path when we may have lost sight of them; they *find us* when we ask not for them. The moral sense and the belief of responsibility demonstrate their reality especially in this way—that so many elaborate sophistries have been resorted to for the purpose of showing that they are not real, and that we may safely disregard them. Human nature, we are told, is ruled by, and it is the passive subject of, a system of causation identical with that which governs the material world.

195. Does the moral sense—does the recognition of right and wrong—do these notions consist with a doctrine such as that which we have here named? Let it be granted that it is *possible* to bring about a coalescence between them. Every thing should be candidly listened to and freely admitted which has been advanced by eminent writers in explanation of the apparent incongruity of the two, the doctrine and the moral instinct.

196. But if we still hesitate to profess ourselves convinced and satisfied, if still we are conscious of a latent doubt, are there not difficulties attaching to any other hypothesis?

197. Opposed to the belief of the intrinsic property of Mind as initiative and sovereign in its volitions, there stands the difficulty of giving it expression in formal propositions. But this very difficulty may well be regarded as an indication of the fact that, at this point, we have arrived at an ELEMENT. If, in truth, its initiative power—its sovereignty—be of the very essence of Mind, if it be its primary quality, if it be that which is its distinction, and which constitutes the

difference between itself and matter, then, by consequence, it must stand beyond the circle of those truths which are capable of being reduced to constituent propositions. If now at last we have arrived at an ultimate fact in the philosophy of Mind, then certainly we must not expect to prove it to be a truth by exhibiting its dependence upon some principle that has a position higher up in the nature of things.

198. But if we assume this belief in the same way in which we assume the fact of our existence and of our continuous identity, and as we assume the reality of the external world and the existence of other minds around us, then we come into the possession of a principle which gives ONENESS to our consciousness, and which imparts coherence to the several rudiments of human nature, and therefore forms a ground of certainty in the region of abstract thought.

199. In proportion as the moral sense is keen and the mind vigorous does the man resent the solace which the casuist may offer him when, in any instance, he confesses himself to be blameworthy. Rather would he endure the full amount of blame which others may throw upon him, or even more than may be his due, than listen to the degrading doctrine that his conduct in this case, though "unfortunate in its issue," was the inevitable product of $A \times B$: it was a *product* sure to realize itself in its destined place in the chain of eternal causation. A mind that is already vitiated, or one that is at once subtle and feeble, may accept evasions of this sort, and may persuade itself that, in logic, they stand good; but the strong and the firm never do so; and the warrantable inference is

this: that no process of reasoning can be admitted to be sound which the consciousness of a well-conditioned mind resents as at variance with those persuasions which, if they be abandoned, the reasoning faculty itself is broken up.

200. The sense of fitness and order may be disturbed as well by a redundancy in any organism as by a deficiency. If there be a wheel in a machine which has no duty to perform, or if a wheel be wanting at any point on the pathway of motion, we disallow the unity of the whole.

201. Let us, for instance, imagine that the chronometer—complete in its parts and adjustments, and faultless in its performance—had come to be endowed with a reflective consciousness; that it knows what it is doing, and knows whether it is right with the stars or not—in this case there is a faculty which has no function; there is a redundant element; for the mind present in this time-piece can have no more occupation than there would be for a mind in a hammer, or a broom, or a saw.

202. It has been fancied that flowers, shrubs, trees, are endowed with consciousness; and how shall we assure ourselves that it is not so? But here again, and on that supposition, the mind of the rose and lily, of the willow or the oak, has no office, or none that indicates itself in any result. As to the life and welfare of the plant, this imputed mind contributes nothing.

203. Or we may imagine the carnivorous species to be gifted with moral sensibilities—with compassion, pity, and a horror at bloodshed, so that it is always with extreme reluctance that the tiger catches and

kills the deer. Such a sensitiveness would certainly be a redundant endowment, and better withheld.

204. No such instances of superfluous endowments or of sinecure faculties present themselves in nature. Every organism is complete for its own purposes, and complete in its relation to the system of which it is a part, but it is not more than complete.

205. Yet among our instinctive convictions none is more absolute or more persistent than that of the moral sense. We feel *as if* human nature, in respect of moral distinctions, differed essentially from all other natures with which it might come into comparison. We feel *as if* MIND in *man* were endowed with a POWER toward good and evil which gives coherence to its consciousness, and which brings its faculties into unison—a power which so centralizes them as that we recognize fitness and order on this ground, as elsewhere, throughout nature.

206. Hitherto none of those theories by the aid of which it has been endeavored to reconcile the doctrine of universal physical causation with the instincts of our moral consciousness and with the doctrine of responsibility have commanded any thing more than a sort of comfortless assent. Never have they been freely accepted elsewhere than in the class-room or the study. Like other elaborate subtleties, they vanish as mists under broad daylight. It is so because they imply that nature has furnished man with a faculty to which no function is assigned.

207. These theories fail of their purpose not merely because they are subtle, but because they stop short at the very point where the order of thought demands

that another step should be taken. This further step leads onward toward that ONE TRUTH which, to the human mind, must be the beginning and the end of intellectual steadfastness or rational assurance. If this ONE TRUTH be left out of our philosophy, or if it be rejected, then (and it is a matter of fact abundantly confirmed in the history of speculative science) nothing is outspread in our view but a pathless course over a dark expanse.

208. An elementary book such as this could not be supposed to embrace a *religious* argument, nor is it within the writer's purpose to furnish reasons available on the side of theology; but yet, wherever the course of thought ought to carry us, there we must go on, whether we are individually mindful of religion or not.

209. By following the course of thought, I mean this—that, as often as any abstract notion indicates some other notion in advance of itself, we should go in quest of it. "On to the end" is the law of thought when we profess to be thinking coherently. But the *end*, in any case, is that notion or principle which gives no notice of another beyond it which might lie within range of the human faculties.

210. The moral sense—the feeling of right and wrong—the judgments we form concerning dispositions or actions, that they are praiseworthy or blameworthy—these elements of human nature are, as we have said, among the firmest of its constituents, and they often give proof of their reality with an energy that is peculiarly intense.

211. But now the moral sense indicates that which

is above itself and beyond itself; therefore, if it be our rule to follow always the course of thought, we must now go forward at this suggestion, and it leads us directly to the conception, however vague, of AN AUTHORITY to which we are related. This conception, under all imaginable distortions, has accompanied human nature—invariably it is the instinctive belief of man.

212. The idea of an authority beyond and above us conjoins itself with the conception of a POWER, and of a purpose too, to vindicate itself, whether immediately or at some time future. It is this set of notions which gives coherence to the moral sense. Without them no aspect of fitness presents itself on this side of human nature.

213. The idea of AUTHORITY, or of a relationship between two beings, each endowed with intelligence and moral feeling, supposes that the *will* of the one who is the more powerful of the two has been in some way declared. It also demands an independence of some kind in the other nature intervening between the one will and the other will. Where the relationship of law, not as a physical principle, but as a *rule* and *motive*, is brought in, then there we must find a break, an interval, and a reciprocal counteraction.

214. A scheme of government taking its bearing upon the moral sense is not a chain along which sequences follow in a constant order, but it is a standing on one side and a standing on the other side, with a clear distance interposed. If we take fewer elements than these as the ground of moral government, the entire vocabulary of morals, popular and scientific, loses its significance.

215. In the material world law is latent, and it makes itself known in the effect only; but in the moral world, while there is also a law that is latent, there is a law that is declaratory, and which (in whatever manner) must proclaim itself anteriorly to the effect, and irrespectively of it.

216. On this ground, then, the course of thought leads us to postulate for MIND an independence which is peculiar to itself, and without which the moral sense would be a faculty without a function.

217. From this point we must advance to the belief of an INDEPENDENT POWER superior to ourselves, and to which we stand related. At the moment when we reach this point, and when we bring our conceptions of fitness and order to a centre upon that ONE TRUTH which is the basis of abstract theology, it is then, and never, if not thus, that the human Mind attains to an assured intellectual resting-place.

218. We sum up what has been advanced in relation to metaphysical speculation in this way:

219. Analytic thought or pure abstraction, pursued to its rudiments, can never yield an assurance of truth.

220. Assurance of truth must be the product of concretive or synthetic thought when it issues in bringing before us a system of fitness and order.

221. A system of government has no completeness or reason—it exhibits no fitness or order, until we recognize its source in the SOVEREIGN RECTITUDE—the DIVINE PERSONAL WISDOM and GOODNESS. On this path metaphysical speculation leads to certainty; on no other path has it ever done so.

VIII.

SCIENCE OF MIND—PHYSICAL.

THE BOUNDARY BETWEEN ANIMAL PHYSIOLOGY AND THE SCIENCE OF MIND.

222. With the world of Mind before us as our subject, nothing is more important than to ascertain, and to do so in the clearest manner, the ground of that distinction which we assume to be real between what belongs to Animal Physiology and that which is proper to Mental Philosophy. A misapprehension on this ground brings with it a train of errors, and leads the way toward fruitless speculations.

223. In the preceding sections it has been attempted to set off from our general subject the results of the abstractive faculty over which the mind has, or may have, an entire control, being, as they are, its own products. The region of metaphysical speculation may thus be so fenced about as that there shall be no interference on this side with what is properly *physical* in Mental Philosophy.*

224. But the partition which we have now before us is of a kind that is not so easily effected. At our

* The term *Physical* Science is here and elsewhere employed in its more usual and restricted sense as relating to the phenomena and laws of the material world. But in this book it is also employed in its more extended sense, as embracing Mental Science; and, as thus used, *Physical* Mental Philosophy is opposed to that which is *Metaphysical.*

starting it was said that we have no *direct* knowledge of Mind otherwise than as it is conjoined with animal organization. The mode or the medium of this combination is utterly unknown, and (we must think so) it is quite inscrutable. This is certain, however, that the reciprocal influences of the animal organization, and of the Mind lodged therein, are most intimate and constant, so that we are seldom able to take up any set of phenomena or any class of facts as belonging to either mind or body with a perfect certainty that they are wholly exempt from influences derived from the other.

225. Or the ground of perplexity may be thus stated: While there is much in the animal organization and its functions which we may believe to be only remotely, if at all, affected by MIND, and, on the other hand, while there is much in the operations of MIND which can be only remotely, if at all, affected by the animal functions, there is still more, on both sides, in relation to which an intimate interaction of the two is a fact unquestionable. Nevertheless, a rule must be found which shall enable us to deal with ambiguous instances of this sort in such a way as may keep us exempt from confusion and error. This rule is, therefore, now to be sought for, and it is such as resolves itself into two or three postulates, as thus:

226. (*a*) A professedly scientific generalization, if it be brought forward for the purpose of throwing light upon any phenomena that may be in question, must show that it has an INTELLIGIBLE CONGRUITY with the subject to which it is applied.

227. (*b*) When facts or phenomena of any kind ap-

pear to combine influences, affinities, forces, of different kinds—as, for instance, some that are mechanical and some that are chemical—the methods of reasoning proper to each of these principles must be carried out only to the extent within which they are unquestionably applicable thereto, and not a step further.

228. (*c*) That partition of subjects which we should endeavor to establish in relation to animal organization and MIND is not of the nature of a *prohibition*, which is set up on the one side for the purpose of limiting the advances of inquiry on the other side, but its intention is this: to maintain the distinction between the two—a distinction admitted to be founded upon the nature of things, and to forget which is to fall into error.

229. Two or three instances will suffice for showing that this rule, as thus set forth, is reasonable, and that it is in accordance with the established usages of modern science.

230. The first of these postulates (*a*) has been disregarded in innumerable instances. Every department of science (*science* it was not) had been vitiated by the neglect of it in the times anterior to the rise of our modern philosophy. The anatomist and the physiologist, believing that they could explain the functions of animal life on the principles of mechanics, talked of the weight and pressure of fluids, and of the elastic forces of the "animal spirits;" and especially by the help of "vibrations," of which the pulpy substances of the body were affirmed to be susceptible, it was supposed that sensation and volition were rendered intelligible; for if only we will admit the hypothesis

that the brain is much like a harp or a piano-forte, then the mystery of the Mind's relationship to matter is cleared up.

231. There must be, as we say, a *congruity* between a theory and the facts of which it is intended to give an explanation, as thus: we look to the mechanical structure of the compass—the suspended needle, the box inclosing it, and the graduated and lettered circle over which this needle oscillates. The mechanism is simple and intelligible. But when we find that this slender wire, whenever its rest may be disturbed, still reverts, with a tremulous constancy, to its first position as related to the horizon, then there comes before us a fact, or a class of facts, of which the mechanical structure of the apparatus offers no sort of solution. Let mechanical principles be applied to this phenomenon with all imaginable ingenuity, they utterly fail to yield us the smallest aid. We must seek it from some other quarter; and although, even in its advanced state, magnetic science is far from standing clear of mysteries, yet it does avail to connect the polarity of the needle with a mass of phenomena elsewhere observable, so that, in a sense, or to a certain extent, this constant tendency may be said to be understood. At the least, we are effectively diverted from the futile endeavor to explain it on mechanical principles.

232. But now let us imagine that the magnetic needle should exhibit a sensibility to music; that it becomes tremulous at the swell of the organ; and that, at the sound of the human voice, it oscillates rhythmically; that it moves from N.W. by N. to N.E. by N. consonantly with the hand of one who is beating

time in a concert. This would be a fact quite of another order; and we must seek an explication of it elsewhere than within the range either of mechanical or of magnetic influences.

233. One further step we may take in this illustration. Let it be that the needle should indicate its consciousness of a conversation that is going on near to where it stands. When certain subjects are brought forward, it becomes agitated; it dips and rises, as if nodding assent; or it performs gyrations—stops at a moment, and starts again, as the argument is resumed. In this imaginable case we are thrown upon a new path, for there is presented to our view a class of phenomena that has no intelligible congruity with those of which physical science takes account. It would be a futile endeavor to resolve *such* facts into chemical, or electrical, or magnetic influences.

234. In any such instance, if we were asked to listen to explanations of this kind, we should turn from them, not merely because we might think them untrue or insufficient, but because they are unintelligible. To the propositions conveying any such pretended explanation we could attach no meaning.

235. Pretended and yet fruitless explanations of facts belonging to the world of Mind have very often been advanced, and they have been maintained and defended with equal zeal and ingenuity. But what is the aid which they afford in the interpretation of such facts? None whatever; for the terms in which they are expressed, though intelligible in relation to the world of matter, retain no shadow of meaning when they are carried across to the world of Mind.

236. A galvanic current indicates itself through a thousand miles of wire, or it excites anew the muscular irritability of an animal recently dead. I do not know how it is that the action of a diluted acid upon a pair of metallic plates should produce these and other effects, but yet they are facts that associate themselves intelligibly with many others, and they are congruous with the phenomena of the material world: they come into their places in those sciences which have to do with things that are visible, palpable, odorous, sapid, sonorous.

237. And thus also the marvels of Photography range themselves with the known principles of chemical science. What may be the inner nature of the actinic ray is, as well as all other "inner natures," wholly unknown; but Chemistry, in clearing up, so far as it can, the mystery of the sun-picture, speaks its own language—goes to work *in its own way;* and it finds itself already acquainted with analogous facts nearly resembling these new phenomena.

238. But now the sight of pain or want excites pity, and this feeling leads me to make self-denying efforts for its relief. A geometric figure placed before me suggests the truth which it symbolizes, and it prompts a train of thought, in the course of which the mode of demonstrating that truth becomes evident. In attempting to give the philosophy of any mental condition or intellectual process such as these, I do not advance a step by talking of chemical affinities, or of the definite proportions of atoms, or of galvanic energies, or of medullary vibrations, or of nervous tensions. All this show of philosophy is pure illusion.

No mind that is capable of consistent thought can bring the forms and phrases of physical science into relationship with the processes or the varying conditions of the Mind.

239. Mind and matter, however intimately combined they may be, are TWO natures, not one. Until we assume this principle as our basis, the sciences which bear upon the two, severally, are found to vitiate each other. THE WORLD OF MIND challenges for itself a mode of treatment proper to itself, and with which the philosophy of animal organization may intermix itself only so far as its language may be interpretable in its own lower sphere.

240. The world of Mind, in behalf of which this challenge is made, comprehends, as we have said, all orders of beings that indicate powers of perception and a centralized consciousness, and that are locomotive from within; in a word, all that have been put in trust of their individual welfare.

241. The terms and phrases by means of which we may convey our notion of Mind as lodged in the animal organization may be varied indefinitely. The wording of such a notion is not a matter of great importance, for at the best it can only be an approximation toward precision; it can be no more where the things spoken of are indeterminately known; and it is better not to affect a fixed phraseology which assumes to know what we do not know.

242. In whatever terms we give expression to such ideas as we may form of MIND corporeally lodged, the elementary idea so conveyed is that of two related natures, the properties of which are, in the most absolute

manner, opposed, the one set to the other set. Whatever is distinctive of the one nature is therefore to be denied of the other. Whatever *is* in the one nature *is not* in the other.

243. Consciousness of the properties of matter is the prerogative of MIND. Matter (as we now assume) has no such sensibility. Initiative power is the prerogative of MIND. Matter is endued with no initiative power—it does not put itself in motion. Mind is not solid, or fluid, or gaseous; nor has it contour, or outline; nor is it blue, or red, or white, or black; it is not sweet or bitter; it has not any of these properties, *because* it has consciousness of them as the properties of matter; it knows them *because* they are not of itself.

244. If what we here assume be true, then it will necessarily follow that Mind and matter must each have its philosophy to itself. The modes of reasoning proper to the one can only be delusive if carried over to the other. That this is the fact might very safely be inferred from what hitherto has been the issue, without an exception, of the many ingenious theories propounded, with the intention of laying open the world of Mind by the help of chemistry, or any of those sciences that are properly called Physical. Every theory resting upon this basis has presently gone off into some quackery, noised for a while among the uneducated, and soon forgotten.

IX.

BREADTH OF THE WORLD OF MIND.

245. THE one expression already employed (240) as distinctive of the community of Mind is sufficiently precise to serve our immediate purpose. This commonwealth includes, we say, all those orders of beings that are endowed with sensibilities and with powers fitting them to be put in trust, individually, of their own well-being.

246. So much as this can not be affirmed of any species usually included in the vegetable kingdom. The individual plant is, indeed, well cared for in the constitution of the world around it; but if, in any instance, its well-being comes to be out of accordance with that constitution, it perishes without help; if light, warmth, moisture, or certain elements in the soil fail it where it stands, the plant dies.

247. The animal finds itself existing from hour to hour, as we might say, precariously; for it lives always on that border where its welfare is every moment tending to get out of accordance with the constitution of the outer world, and where it will speedily perish unless rescued by an exercise of its faculties. By its own efforts it must bring itself again into due relationship therewith; if it should fail to care for itself (in so far as its structure implies that it should do so), the elements will not care for it; nor will its own, nor other species, care for it. Death is the penalty of

the remissness or of the helplessness of the individual animal.

248. This condition of *trusteeship* for the individual life implies, by necessity, the possession of faculties of perception toward the outer world, and a consciousness of organic pain and pleasure, and the power and the means of locomotion; and with these, a prehensile mechanical structure. These conditions again imply sensorial centralization, or a ONE CONSCIOUSNESS more or less reflective. This one consciousness is MIND; or we may prefer to speak of it as the product of Mind.

249. When, in terms so comprehensive as these, we open a way into the great theatre of life—conscious life—we enter what must be to us a scene infinitely extended. How vast are the dimensions of this stage of intelligence—this consciousness of enjoyment and of suffering!

250. But it is likely that, upon the very threshold of this theatre, exception may be taken, and some may even resent the invitation to enter precincts within which the dignity and high prerogatives of human nature seem to be compromised or to be brought into jeopardy. A feeling of this sort will, however, give way, after a little reflection, to feelings quite of an opposite kind.

251. An undefined repugnance to consort ourselves with the countless animal orders around us, and to think of them as our fellows, and to regard the herbivora and the carnivora—the mammals, and the mollusks, and the infusoria, as tenants in common of the planet, leaves us liable to be scandalized at every turn by palpable instances of the fact of this fellowship.

But if we bring ourselves to look well to the grounds of the alleged agreement, and then acquaint ourselves with the reasons of the difference, and if we understand the boundless extent of that difference, we shall exempt ourselves ever afterward from all disagreeable revulsions of feeling such as we now suppose.

252. In fact, much of that which is to invite attention in this elementary book will consist of an exhibition, first, of what is common to all orders of living beings, and then a setting forth of what is peculiar to the human mind, and which is the ground of its immeasurable superiority.

253. Our modern science, with its explorative instruments, brings us into position for looking around us through space and time in a manner which was not possible to our predecessors. We know more of the world of life than was known or than was at all surmised by philosophers only three centuries ago—more in the proportion of many millions to one. This far-extended prospect can not but affect the feelings with which we regard the constitution of the animated world; and it must bear also upon the conclusions, moral and theological, which may warrantably be drawn from the fields of natural history.

254. The philosophic and the contemplative minds of former times might almost be envied some of the prerogatives of their ignorance as to the relative position of man on earth. Man—his energies, his destinies, the range of his reason, and the intensity of his tastes—his relish of the beautiful—these things were, to such minds, the world—the universe. As to the orders around them, "the fishes of the sea," they were

the servants of man—some of them; they were his aliment—some of them; or they were the decorations of his world; they were the things that are moving or at rest upon the foreground of lordly human existence, or they were the objects that fill the spaces in its background. Man was the only being of whom much account should be taken.

255. But it is no longer possible to us at this present time, or it is a possibility confined to the sentimental and the poetical, to look around, in any such mood as this, upon the great world of life. Upon the broad platform of conscious existence the aristocracy of mind is overborne by the democracy: in the ecclesia of all that live, man finds himself outvoted millions to one.

256. It is after a recollection of himself—it is upon the ground of a new estimate of his powers, that man regains his position, and that he challenges anew a supremacy which shall never again be called in question. The ancient belief of the dignity of man as master of the world was not wrong in substance, but it had been formed in ignorance of the facts. The facts, as they are brought before us in our modern science, have this meaning—they confirm this estimate in its substance, and they give it also a vastness of meaning that is incalculably extended.

257. Modern science has brought us into acquaintance with the animated world in two modes that are independent of each other: the first of these is that afforded by the revelations of the microscope. We should keep far within the limits of truth in affirming that this instrument gives us the knowledge of living

creatures—a million for every one that may be known to the naked eye, and that was actually known to the naturalists of antiquity. The conjecture might be hazarded that the animals of all orders known to the fathers of ancient philosophy as the tenants of earth, air, and water, may be outnumbered by those which the microscope shows to be enjoying existence in a gill of water from a stagnant pond.

258. Very many of the species that are comprehended in this modern revelation are found to be possessed of a high organization, and there are but a few concerning which we should be in doubt as to their right to claim a place among those that are "put in trust of their individual welfare." Sensation, perception, a central consciousness, and, pre-eminently, the powers of locomotion, are seen to belong to beings of whom as many as there were men in the army of Xerxes might be marshaled in open order upon a sixpence!

259. The vastness of that theatre of conscious life which the microscope opens to our view might be symbolized in various ways, as thus: We take the Earth, with its inhabitants, as known to antiquity—the beasts of the field, the fowls of heaven, the creeping things, and the fishes innumerable; a multitude, indeed, beyond computation! But now we transport ourselves to the Sun, and we wander over those resplendent plains upon which no shadow falls. These fields of light, like the dim surface of the earth, we may suppose to be thickly peopled with the living—land, and water, and air are all tenanted; but the proportion of the area of the sun to that of the earth does not exag-

gerate the numerical difference between the animal population known to antiquity, and that which is made known to ourselves by the microscope.

260. The second of these revelations above referred to is that which the modern Geology has brought forward. This planetary theatre of conscious existence, vast as it is, we should learn to think of *first* as the creation of to-day; or let us take what might be the average lifetime of all species, some spending their entire inheritance of good in the mid-hours of a single summer's day; some—it is the few—are Nature's annuitants through a century. But the average longevity of all animated orders would probably be found to come within the compass of a summer; or, if the overwhelming numbers of the short-lived are duly considered, the conjecture may be admitted that animal life runs through its course, completes its individual destiny, and is replaced by its successors several times in the circuit of each year. As to marine insects, it need not be supposed that their season of life is dependent upon the alternation of summer and winter; and as to the terrestrial orders of the temperate zones, Earth has its months of life on each side of its equator, and within the tropics there is no cessation.

261. But throughout what cycles of time is it that this planet has thus continued to renew, from year to year, its tenantry? No answer can be given to such a question; and yet, unless our modern Geology has altogether failed to interpret its data, it is true that years, beyond all power of computation, have run on, giving life to new ranks of beings, and these in each class innumerable.

262. Unless, therefore, our modern Geology has altogether misread the book, the leaves of which it has so lately opened, it is certain that, through a lapse of ages in comparison with which the period of the human family upon earth is but an hour, this Earth has yielded itself to the support of animal felicity with incalculable copiousness. Conscious existence—one, as its intention, and varying very little in its primary elements, although infinitely diversified in its exterior and its structure—has spread itself as a deluge over all lands, and has filled the volume of the deep.

263. Putting out of view just now these last brief years of human history, it may be asked, For what purpose has this planet sped its way through space from the morning-time of the creation—from the era of the fossiliferous rocks? Not, we may be sure, to clothe itself in mosses, not to deck itself with ferns, and to tuft itself with palms, but rather to nourish the consciousness of good.

264. During the lapse of planetary time stupendous catastrophes have once and again swept over the surface of the globe, in whole or in part, and animal life has often gone down, with its countless millions, into the abyss; yet it has ever and again reappeared; the waste has been made up, the desolated places have been occupied—they have been crowded anew; and again, through millions of years, ardent suns, rising and setting over a fertile world, have seen earth, and air, and seas quite full of life—a world throughout which Mind has wrought its purposes in ten thousand different roads, but always effectively, and with great success, in quest of its well-being.

265. We should accustom ourselves to look abroad upon the field of animal life away from that point of view from which it is seen only in contrast with the more highly-developed faculties of the human species. Instead of thinking of it under any such disadvantageous comparison, let us sometimes think of it in its absolute quality, or such *as it is*, and such as it would seem to be if we could take a position far out of sight of humanity.

266. If in this manner we may succeed in breaking in upon our habits of thought, and in forming an estimate of the wider world of life, unprejudiced by any comparison, we may be led to believe that the prerogatives of the lower orders of animal existence are of a kind which even humanity might be tempted to think enviable. What, then, are these prerogatives?

267. The correspondence of organized beings with the material world takes place through five, six, seven, or more channels. It is true that there are orders that seem to be confined to one or two only of these inlets of knowledge, but then there are some—those of the insect class especially—that indicate perceptions such as the larger animals and man have no consciousness of. As to the five senses, several of the larger animals possess them in a degree of acuteness which we can scarcely conceive of. Yet it is not on the ground of these more acute powers of sensation in relation to the outer world that the prerogatives of the inferior orders should be affirmed to surpass, very greatly, those of the human species.

268. Nevertheless, while this subject of the sensorial organization is before us, a fact suggestive of an im-

portant inference may properly be noticed. Amid those endless diversities in the modes of existence which display themselves throughout the animated world—differences the most extreme in structure, and in function, and in form—there prevails almost an unvaried sameness both as to the *objects* of sensation and as to the organization which is its medium. Mind touches upon or converses with the material world in respect of light, sound—the two classes of (as they may be called) chemical properties, namely, those addressed to the organs of smell and taste—and as to solid extension and the *vis inertiæ* of masses, as well as one or more properties that are obscurely indicated in the instincts of some insect orders. Diversity belongs to the exterior of animal life, but at every step of our advance toward the interior more and more of sameness prevails.

269. The inference that is suggested by these facts is this: that Mind is a uniform principle; that it is one element; and that, in its relation to the material world, its points of contact can be only few.

270. The animal force, as related to the size and to the mass of the body in each species, is far from being in direct proportion to either. As a more general rule, the animal force, as related to the mass, is *inversely* as the size of the animal. To this rule there are many exceptions; but it so far prevails as this, that in the insect orders, and in some of the infusoria, the locomotive power superabounds in a ratio that is incalculably great.

271. Moreover, in many instances among the diminutive and the microscopic species, the locomotive

velocity surpasses very greatly the *apparent* sufficiency of the mechanical apparatus by means of which it is effected. This *apparent* excess in the effect, as related to the (mechanical) means or cause, might perhaps be alleged to have some place in the instance of the swifter birds; yet in a still more distinct manner does it present itself in some insects, and in those microscopic swimmers and skaters in the organization of which it is very difficult to detect any *adequate* means for effecting the incalculable speed of their incessant movements.

272. It may be left as an open question in the department of animal physiology whether, in the instances that are now referred to, that rudimental energy which is the distinguishing property of Mind comes to bear *mediately* or *immediately* upon the *vis inertiæ* of matter and upon the weight of the body. There may, for example, be room for the conjecture that the rudimental animal energy being, in all orders, a constant quantity, or nearly so, when it is lodged in a body the mass and weight of which are almost infinitely small, this power superabounds to a prodigious extent in relation to the work it has to do, so that the volitions of the animal carry it with electric speed in all directions.

273. Leaving a surmise of this sort to be ascertained or rejected, the unquestionable fact stands in our view, unaffected by any such conjecture, that a locomotive and a muscular force is enjoyed by some of the volatile insect orders, which, if it had been conferred in the same proportion upon the lion and the elephant, would have made them indeed the tyrants of creation.

The eagle, if gifted *proportionably* with the wing-power of the dragon-fly, would be free of all continents —would range the planet at large, and would prevent the morning, perching in one hour upon the Andes, and in the next upon the Himalaya.

274. As to the consciousness of the animal when in the exercise of its locomotive and muscular force, no account is taken of the mechanical means through which the effect is produced. Whether the volition realizes itself in the way which we are wont to imagine when we think of the movements of celestial beings, or whether the machinery of wings and limbs, of bones, muscles, nerves, be all, it is the same to the antelope, to the swallow, to the fly, and to the hungry atom which darts from side to side of a drop of water in quest of its prey.

275. On this ground we must be quite safe while we interpret animal consciousness at large by the analogy of our own consciousness; and in doing so, we may look back to that bright season of early life—say from the twelfth year onward toward manhood—which is especially the season of muscular sport, and throughout which the force of the body is, more or less so, much in excess of the demands that are made upon it by the exigencies of life. During this gay gymnastic era, and, indeed, long beyond it, among those who are exempt from toil, the mere consciousness of animal energy, and the free exercise of it within the limits of fatigue, is pleasurable in a very high degree: it is *animal good* of an intense kind.

276. Grant it—which we may grant—that, in the more complicated structure of human nature, the rudi-

mental or organic enjoyment of movement and sport soon surrounds itself with various incidental pleasurable emotions, which enhance it very much, yet there is here again a balance in favor of the animal orders around us; for with many of these the powers of locomotion, if we estimate them in relation to the size and weight of the animal, are immeasurably greater than they are in man. These powers are also far more *persistent;* that is to say, the exercise of them does not so soon induce exhaustion and bring on the sense of fatigue. In truth, it may be doubted if, either in the instinctive movements of animals while in pursuit of their welfare or in their purposeless gambols, that collapse of the muscular energy which so soon brings it to its end is ever experienced.

277. Those indeed must be stern philosophers who can watch the gambols of the young of animals, and, refusing to interpret them by the aid of analogy, would ask direct proof of the assumption that these coursings and jumpings, these purposeless circuits, and these races to no end, are pleasurable. We take it for certain that they are so; and then we may look abroad upon the great theatre of animal existence—upon earth, air, and water, and admit the belief that the outgoings of the locomotive energy is the staple of animal enjoyment; that it is a good which, if it be less intense, is yet of much greater amplitude than that attending upon the satiating of appetites. To satisfy hunger is to assuage a pain; not so to sweep the cool and bright morning skies with wings that do not tire.

278. If to man labor has its pleasures, or, rather, its satisfactions, this pleasure comes in only as a com-

pensation, alleviating, more or less, the pains of toil. Human labor may indeed be cheerfully borne, and it is so by the young and robust; but labor exacted by want, near at hand or remote, is undergone because it is the less of two evils.

279. It is not so with the animal orders. We must here note a difference which gives great meaning to the comparison that is just now in our view. The labors of animals—such as those of the bee, or of the beaver, or of the bird in nidification, or of the ant in the care of its young, or of the silk-worm, or of the spider—these various constructive labors might be brought under two designations, for they are the products either of what we might call fixed reason or of free reason. The difference seems to be real.

280. Insect architecture, as that of the bee and the wasp, and we might include the nidificative skill of some birds, conforms itself invariably to the principles of the very highest reason; but it is fixed reason: the rule of the work has been stereotyped in the animal mind, and the creature seems to be a tool only in the hand of an occult intelligence. But there are many orders of animals whose agency in pursuit of their object consists in a variable appliance of individual skill and address to the varying exigencies of the moment. There is much of this sort of free or versatile reason in the wiles of all carnivorous animals: there is a decisive display of it in the labors and the social toils of the ant, and not less so in the devices of the rat, one of the most knowing of creatures. As to domesticated animals, with them, for the most part, the fixed reason has quite given place to the free, and thus it is that

the shepherd's or the sportsman's dog listens as intelligently as the drover's boy to the shrill verbal admonition, "Look sharp, there!" when the bewildered flock are hurrying through a town.

281. But the difference that should be noticed is this—that in all those animal labors which are achieved in conformity with what we have called fixed reason, there appears to be an established or stable equilibrium in the animal structure between the work that is to be done and the force which is to do it. The force is always as the labor; it is an equation that is constant and involuntary; so that no sense of fatigue, no effort, no determination of will, attends this species of work; there is no exhaustion or waste consequent upon an incidental excess of the task beyond the strength of the animal.

282. An inference of a very different kind is suggested when we watch any of those labors, constructive, predatory, or defensive, which come under the second of these designations, and which are of the nature of appliances fitting the circumstances of the moment. In any operations of this latter sort, induced by an occurrent object, and conformed to its specialities, the signs of fatigue and exhaustion soon make their appearance: the animal slackens, pants, abandons his purpose, or resigns himself to his fate. Nature has, indeed, bestowed upon him a very large amount of muscular force, but it is not, as it is in the other case, a definite quantity, measured against a task which is also definite.

283. Here, then, a prerogative of animal existence throughout the lower orders presents itself. Human

labor, to the whole extent of it, is a task that draws upon the stock of strength; it is a *task* which, from its commencement, is producing exhaustion, and which must come to its end in a collapse of mind and body.

284. In *this* species of exhaustive labor the animal orders participate to some extent, yet (if domestic animals are excepted) it is under conditions that are far less severe. But to a much greater extent these orders sustain no such burden; for, as to these carpenters, these masons, these joiners, and weavers, and spinners, they plod on, from early to late, unconscious of weariness: they cease to labor, but they do not then throw themselves, as if worn, upon their beds.

285. We may now fancy ourselves in the heart of that wilderness of life through which the Amazon rolls its volumes. Life upon this broad surface develops itself in all its power: the humid heat, the rampant growth of gigantic plants and trees, the crowding of all species, feeding upon never-exhausted stores, and in their turn devoured—all things favor the replenishment of this region with animation to the utmost extent that may be possible. What is aimed at in this commonwealth, and what is accomplished, is indeed "the greatest good of the greatest number."

286. But as to these millions, many as they may be, each individual of them is required, from sunrise to sunset, or perhaps from sunset to sunrise, to look to himself, and to acquit himself well as the guardian of his particular life and happiness. Who, then, shall calculate the prodigious amount of labor that is summed up in this round of daily work? In this region there is often great noise; there is chattering, and

chirping, and screaming, and wrangling; but as to the work that is done, it goes on silently; and not only silently, but without inflicting any suffering upon the work-people: the twang of the driver's lash is not heard in all this populous district. Works admirably finished are turned out here; but no brows are bedewed with sweat, no tears are shed upon unrequited toil: the bread that is eaten is not the bread of sorrows. The labor could not have been more easily performed even if spirits from an upper world had come down to it.

287. We are treading upon ground far more firm than that of a happy and benevolent conjecture when, bringing ourselves into position for looking down upon (let it be) a tropical continent replete with animal life, full of innumerable species, we think of it in this single aspect as a vast place of work where labor is not toil; where there are no task-masters; where there is no controversy between wage and capital; where life and its costs are always an equation; where existence is no burden, and where it pays no tax except the final penalty, the poll-tax that is levied upon all that breathe.

288. A tropical wilderness is, however, not merely a great workshop, but it is a theatre of gorgeous decoration; and here, although it is not so among ourselves, the work-people are all, and always, well dressed. Just now we have affirmed that animal labor is not a drudgery; and thus, and as if it were to attest the fact, and as if Nature would wish us so to interpret her dealings with her household, so it is that these laborers are never to be seen otherwise than in

holiday trim. Throughout Nature's *own* industrial districts, the work that must be done is effected by those who (as to many of them) are attired like princes; they are decked like the grandees of an Eastern presence-chamber.

289. But to what end is all this embellishment? Why is there so much gold and jewelry? Why so much wearing of plumes? Why are the colors of the rainbow sprinkled, and spotted, and figured upon these mantles and coiffures? Why is each guild so sumptuously emblazoned with the symbols of its ancestral glories? These are questions which force themselves upon the contemplative man who paces his garden in a summer's morning, and they admit of more than a merely conjectural answer.

290. But in seeking for an answer we need not travel so far as to a wilderness of the torrid zone. We may find it in the hedge-row nearest our cottage gate.

291. Every step of that advance which modern science has made, and which it is daily making, confirms our faith in the principle that, in the economy of the material world—and we are now thinking of the systems of vegetable and animal organization—there is absolutely nothing superfluous, nothing which has no purpose. There is nothing included either in the structure or in the functions of plants or animals which does not fulfill an intention. In certain instances we fail to divine the end or reason; but in these exceptive cases, what is unknown, or what is not interpretable, still bears upon its front the easily-recognized characteristics of order and reason; and we freely admit the

saving inference that, although human science has here something to learn, Nature's work is neither incomplete nor redundant.

292. Vegetable and animal organization in all species is copiously decorated. In some, and in many species, this decoration is gorgeous; it is more than simply elegant—it is regal, both as to its contours and its colors, and in the polish and the finish of its surfaces. This broad fact is, in truth, the broadest of all the facts which offer themselves to the eye of man when he looks about him in field or forest.

293. But the analyst will ask, What is decoration? Is it a *reality* in nature, or is it only an aspect of things which owes its origin entirely to the human mind? So far as this there can be no question, namely, that the forms, the figurings, the tracery, and the polish of surfaces, and the coloring in patterns—these things are real; the only question there can be room for is this, Whether that *ornamental meaning* or value which we assign to them is also real, or whether it be factitious? whether, *as decorative*, it has a place in the purposes of Nature, or is only an illusion constant and natural to man?

294. If we were to take up this latter supposition, then the entire class of facts, attaching in different degrees to all orders of beings, vegetable and animal, remains to be accounted for. If, in itself, decoration is nothing, then what is the purpose of those forms and colors which we *think* to be ornament? The longer we look at any elaborately-ornamented species, the less inclined shall we be to surrender our instinctive feeling that ornament *is ornament;* that gay colors

are gay; that fine enameling *is fine;* in a word, that beauty of all kinds *is* beautiful.

295. But if we assent to this bold and yet reasonable conclusion, then a second question demands some kind of answer. For whom, or for whose eye, does Nature thus richly deck her children? In respect of whom does the organized world, as to its exterior, show so much art, which is more than the mere machine demands? For what purpose, or for whose entertainment is it that, while the interior machinery of life, vegetative and animal, is left to be arranged and finished under the direction of mere reason, the exterior—the visible adjustments, obey quite another law? Why is that which we call *decoration* always placed where it comes within the reach of eyes?

296. We may say that ornament—beauty of form and color, are good in the eye of the Creator. This must always be true; but the answer does not meet the question; for that which is good to the Creative Mind is good in respect of some *purpose* included in the creative plan, and which we have yet to look for.

297. Dare we say that the decorative element, attaching as it does, and as it has ever attached, to orders far remote from human curiosity, has no other purpose than that of attracting the listless admiration of man? How can we imagine this? Man has walked the earth only during these last few days of planetary time. Creations, each of them gay and fair as this, have had their times, and have passed away almost an eternity gone by.

298. But shall we entertain the conjecture that the beauty of the world is for the recreation of celestial

visitants? This, or any other surmise equally gratuitous and fanciful, may amuse an hour of reverie, but in this place we are in search of reasons or suppositions which may stand good on grounds of some positive evidence.

299. There is a practicable path open before us on this ground. If the question be put in its most comprehensive terms, Whether the animal Mind be susceptible, like the human Mind, of pleasurable emotions of a more refined or intellectual sort than are those which attend the satiating of appetites, then we find a conclusive answer to such a question in the sweet melodies of the woods. It does not seem possible to be skeptical in relation either to these facts or as to the inference which we draw from them. The singing of birds, grateful as it is to the human ear, is it not intensely grateful to the ear to which it is actually addressed? Few would be so stern in their logical exactions as to demand any further proof in support of this inference than that which commands our assent when we listen, in the lone woods at night, to the swelling music of the nightingale. Is not the male bird conscious of the excellence of his own performance? and does not his mate confess the charm?

300. Our inferences, then, are of this sort: the woods in May and June resound with melodies: this is fact; it is not surmise; and there are ears to listen to these notes: this is fact also. We infer—if the inference be not too bold—that there is a pleasurable sense in the animal Mind quite analogous to that which belongs to the human Mind. The animal Mind is not merely animal or brute; it has its intellectuality, and it has

its emotions of pleasure (intense, probably, as they are simple) derived from sources of a higher range than those which bear upon the animal preservation.

301. But is the animal Mind conscious also, and pleasurably conscious, of beauty in form and color? To reach a probable answer to this question, we place some unquestioned facts in view, as before. The vegetable world, over and above its necessary organization, or its mere machinery of life, growth, and fructification, is richly decorated; its contours and its coloring are thrown over its structure and its functions of life—of reproduction and of fructification. In like manner, as we have just now said, decoration, as well in forms as in colors, is a constant fact in the animal world. But if so, for what purpose?

302. We must here, for a moment, commit ourselves to a strong inference, resting on the ground of analogy. Facts carry us some way, yet they are not absolutely conclusive. Thus far they sustain our supposition: certain orders *become* conscious of the decorations that are bestowed upon them by man. It is so with the horse and the elephant, unquestionably. But is not the peacock, as he unfurls his splendors to the admiring sun, is he not vividly conscious of *his own* magnificence? We can not watch his movements and doubt it: his eyes, advantageously mounted in his versatile head, have a constant prospect of this emblazoned fan; it is always in his view; and the creature struts and turns as if he would court other eyes to be fixed upon it too.

303. Less distinct, perhaps, may be the indications of the same kind which we should gather from a spec-

tacle that is not less attractive. In the noon-hour of the summer's day we stop, as if doubtful whether we should take so great a liberty, to gaze upon the "Red Admiral" butterfly (Vanessa Atalanta), which perches on the brim of the gayest flower in the garden. The wings, not then in use for flight, yet are not folded or brought together, but are held erect and apart, and they show a twitting motion, as if to give the utmost advantage to the rays that fall upon the downy surface. The creature's eyes are so planted that, while the calyx of the flower is before it, the field of its vision is chiefly filled with its own outstretched beauties. Child of an hour! in its structure it symbolizes the thoughtless felicity of its own lot. The past troubles it not; the figured velvet of its wings is its only retrospection; and the only future in its thought is the honey-pot at its feet.

304. Without doing violence to any rules of scientific logic, we may either accept or reject the hypothesis which is now before us. If we reject it, then the exterior of the organized world, throughout the vegetable and animal orders, presents a problem that can find no solution. Why are fruits and flowers, why are birds, butterflies, and shells, and all things else, decorated? Why do we not find them to be simple machineries, quite as sufficient in relation to their destined purposes without a decorated exterior as they can be with it. The decoration is indeed no encumbrance to the machine, but then it has no assignable purpose; and yet, in all things else, Nature does nothing without a purpose.

305. If we accept this hypothesis, then at once the

sense of fitness is satisfied, and it is much more than satisfied. With how rich and copious a consciousness of benevolent intention do we now enter the great theatre of the animated world! On all sides there is gayety, beauty, simple elegance, and gorgeous magnificence. Nor has this theatre been thus fitted up in vain. It has its sweet melodies, its incense, and its perfumes; it has its forms of grace, and its endless commixtures of bright colors; and there are eyes every where to gaze upon it; and, moreover, within the Mind-cell of these myriads of beings there is (so we now assume) a vivid consciousness of whatever is thus invested with any pleasure-giving property.

306. In the human mind every source of enjoyment combines itself quickly with various mixed sentiments; and in proportion as it thus complicates itself, it often becomes less intense. Nor do the pleasures of taste fail to meet many abatements, derived from distastes, or from sources of sadness or melancholy. But it may be easily believed that those rudimental pleasures that are allotted to the lower animal mind, if they lack expansion and elevation, yet have a compensation in their pure and undisturbed intensity. This supposition we accept as on every ground probable; and, in accepting it, we may think ourselves free to entertain the tranquilizing belief that the beauty of the visible world is a beauty of which there is a perpetual fruition in the consciousness of all that live—some, perhaps, in a low degree, and some to such an extent as well to justify what we might call the lavish ornamentation of the world of organized beings.

307. The same rudimental intensity manifestly attaches to those instincts and feelings in the animal system which correspond to the more refined emotions of the social sentiment in man. What we need not scruple to call the conjugal affection and the passionate parental fondness—an heroic care of offspring—these elements of animal life give such evidence of their presence and their power as admit of no doubt.

308. These semi-moral affections, which so often touch upon the very borders of the moral economy, and which, as one might say, trench upon the ground of generous and tender human affections, and which can not be contemplated by ourselves without emotion—these affections—these conjugal and parental fervors, are nevertheless confined within such limits as secure them against those sad and often agonizing revulsions that draw rivers of tears from human sufferers. The semi-moral affections of the animal orders around us are short-dated; they abide in their energy for a season only; they leave no traces where they have prevailed with the utmost force. These feelings of one class do not complicate themselves with feelings of another class; there is no evidence to that effect, or that they consolidate themselves upon the individual mind so as to constitute individual character. If, therefore, they fall far short of the elevation, and compass, and dignity of the analogous human affections, they are altogether exempted from that large counterweight of sorrow and suffering under the pressure of which the heart of man is so often crushed.

309. As to each of the constituents of animal well-being, this general affirmation has a place: It is a

good, enjoyed to the utmost extent which may consist with a perfectly secure exemption from those counteractive sufferings that affect the mind much rather than the body.

310. Hence it is that the *happiness* of the animal orders (if we can allow this word to be applied to the well-being of any beneath ourselves)—this happiness must be set forth under its negative aspect: after we have thought of it as good in an absolute sense, we must think of it also as good in the sense of an exemption from the ills that attach to a higher order of well-being, that is, the human.

311. We may bring forward any one of the more highly-developed animal species, and ask, What more could have been done for this living structure? What gift, additional to its actual endowments, could have been conferred upon it, only stopping short of those gifts, intellectual and moral, the possession of which involves the risk of loss or damage as to what is already possessed? It will not be easy—we should rather say it will not be possible to name or to imagine any such bestowment. In seeking for a boon that might safely have been bestowed upon the lower orders, we must look among the prerogatives of human nature; and as to each of those which are the distinction of man, each has fully shown its perilous quality.

312. Animal happiness—let the word pass at this time—animal happiness, taxed as it is with the liability to momentary organic pain, the pangs of death included, is taxed in no other way. We may certainly affirm this, because a liability to suffer in any other, and, as it may be called, higher mode, could not exist

except as the consequence of the possession of higher faculties, which would give evidence of their presence in the actions and habits of the animal.

313. By the rule that there is nothing in the constitution of man which has not been dimly symbolized in the structure of the lower animal orders, we may grant to some of the domesticated animals—to the dog, the horse, the elephant—a shadowy sensibility to moral sentiments—a consciousness of good and of its contrary, just enough to bring them within the penumbra of the moral system. But this is the utmost that can be alleged on this ground; and, therefore, it is safe to affirm concerning these countless millions of conscious beings that to them the field of their existence is an Eden: they sport their day, unknowing as to evil; they are exempt from dark surmisings, from gloomy forebodings, from terrors of the imagination, from heart-achings, from remorses, from jealousy, from harbored malice, from the torments of baffled ambition, from the sense of humiliation; they know nothing of the gangrene of pride; they sustain not the listless consciousness of life without a purpose, or the weary sense of life overweighted with labor and care.

314. To the animal orders, the future, in its forms either of hope or of fear, has no existence; to them the forecasting of the future is a germ only, serving to vitalize certain conservative instincts. Nor can the past be more than a residual fragmentary element, mingling itself, without product, with the consciousness of the present moment.

315. Such as these, then, so far as probable conjecture, following the indications of palpable facts,

may lead us—such as these are the conditions under which life, with its faculties of enjoyment, has been granted to innumerable species, through countless cycles of duration. This, or nearly such, for we can not here greatly err, is that idea of good which gives law to the creation. A higher idea, and we must admit it to be higher, namely, that of intellectual development and a moral system, is the rare and the recent exceptive instance.

316. Leaving, then, this exceptive instance to be considered on other grounds, and to be brought within range of principles which physical science can never supply, we are free—and, perhaps, we may do so in a more ample and distinct manner than heretofore—to rest upon the tranquil conception of a scheme of existence, the length and breadth, the height and depth of which surpass all powers of thought, but throughout which GOOD prevails; upon which EVIL makes no inroad, and upon which organic pain glances only for an instant.

317. With such a scheme neighboring upon us, it can not be well to leave it out of our account when our purpose is to explore the WORLD OF MIND.

NOTE.—Comparative Physiology, in its present state of advancement and expansion, is rich in instances confirming and illustrating what has been advanced in this section. A volume would soon be filled with such illustrations; but to adduce them in this place would too long interrupt our pursuit of that which more directly belongs to the purpose of this elementary book. In a supplementary section, some facts gathered from this field, and which are peculiarly significant in relation to our subject, will be brought together.

X.

RUDIMENTS OF MIND.

318. In any case when we are in search of what we believe to be rudimental in the constitution of things, two courses are before us. The first of these might be called the chronological path; for instance, we may seek for that which gives the *earliest* indication of its presence among the several constituents that are in question. The second path is that of analysis; and the result we are seeking for will be that one element which, in the most absolute manner, defies our endeavors to give expression to it in descriptive terms, or to speak of it otherwise than by substituting one name for it instead of another.

319. Taking, then, the first-named of these two courses, we ask, Among those elements that are assumed to be the distinguishing characteristics of animal life as compared with vegetable life, which of them *is the earliest dated?* In seeking an answer, we should be careful to avoid whatever belongs to animal physiology, and, therefore, we leave to the physiologist the history of the embryo; but this fact we are entitled to receive from him—a fact which he must leave just as he finds it, unexplained—namely, the manifestation of individual life in the embryo long before the animal has conversed with the outer world by the eye, or the ear, or other senses.

320. Very properly, we decline to enter upon a sub-

ject so occult as this, but yet it may be affirmed that muscular movement, differing essentially from any movements that are observable in the vegetable world, precedes sensation, unless it be some undefined consciousness that is earlier dated than parturition.

321. In this way, the animal, before its entrance upon the world, declares itself to live, and it lays claim to its individuality long before it has concerned itself with the things of the world. This, then, is the reply to our inquiry as to the first rudiment of mind, if we seek it on the chronological path.

322. The result is the same if we pursue inquiry on the path of analysis. Sensation is composite; it is the product of two or more forces from without, acting upon an organization that is complicated in its structure. There are five, six, or more kinds of sensation; and when these are compared—any one of them with any other, or when, in turn, we compare one with all the others—we find room for distinctions and for descriptive statements. In sensation more is implied than a simple and single rudiment. Certainly there is more than there is in that which we are intending to name as indeed the first rudiment of mind, namely, POWER or Force, as related to the masses of the material world.

323. Again we refrain from that which belongs to animal physiology, and, therefore, make no inquiry concerning a nervous system, or that muscular apparatus through which animal movement is effected. MIND has no consciousness of nerves or of muscles: volition is a purely rudimental fact, having respect to nothing but the mental intention which is realized at the in-

stant when it takes place; how realized the mind neither knows nor cares, but the physiologist may discover if he can.

324. At this point there stands before us an instance very proper for showing the independence and the separate departments of mental science and animal physiology. When the physiologist has told us every thing that he knows concerning those sensations which give rise to the volition, and then concerning the conveyance of these, by one set of nerves, to the sensorium, and then the conveyance of—he knows not what—by another system of nerves, to the muscles (the extensors, or deflectors, or any others), and then the contractile irritability of these muscles, and then the pull upon the bony leverage—when we have learned all these particulars, or any others, there remains a connecting fact to be sought for, which, if we fail to find it, must be reserved as forming the inscrutable link between Mind and Matter; it is that, the reality of which we may confidently assume, but concerning which we can know nothing beyond the fact of its reality.

325. On the one side there is THOUGHT; or we may call it, as we please, volition, or intention, or any thing else. On this ground, the choice of words can neither help us much nor hinder us much. On one side there is Thought, or *Mind in Act;* on the other side there is motion, taking place in a mass, larger or smaller, heavier or lighter. The intervening apparatus we are unconscious of—we are quite mindless in regard to it: it is to the Mind as if it were not.

326. We occupy nearly the same position as to the

organs of sensation. We know nothing of the eye or the ear unless we choose to give attention to them; nor do we know any thing of the connection between the organ of sensation and the Mind. Up to this present moment no progress whatever has been made, either on the side of physiology or on the side of mental philosophy, in stepping across the interval between Mind and Matter. If the time should come when this inveterate mystery may be spoken of as cleared up, two sciences must then be melted into one; but until then they must be treated apart, and each in its own manner.

327. The word *Thought* usually carries with it several constituent ideas, of which hereafter we are to speak; in place, therefore, of this word just now, we say, *Mind in Act toward matter* is the earliest, and it is the most rudimental of those characteristics which distinguish animal life from vegetable life.

328. When the individual consciousness has become developed to some extent, as we shall see presently, mind begins to act upon itself; but before this development has taken place, it acts upon matter in the mass. There is, however, room for the question whether it does not, in some occult manner, act also upon the animal organization chemically, or otherwise than by volition. It may do so, and there is reason to think that it does; but this kind of agency, because it is involuntary, and is unconsciously carried on, belongs rather to physiology than to the science of Mind.

329. The *intensity* of the Mind-force, differing as it does, by so many degrees, in different orders of an-

imals, has already been spoken of (272, *et seq.*). The subject, highly curious and significant as it is, could not be entered upon to any good purpose apart from its relationship to animal physiology. A word only can be here admitted indicative of the course which such an inquiry might pursue.

330. It might first be inquired, What are the limits of the Force of animal volition as related to matter in the mass, or to gravitation, or to the resistance of the medium—air or water—or to the tenacity of solids? These limits seem to be of the same kind as those which set a boundary to all mechanical appliances, namely, the strength of the materials which we must employ. It is so with steam-power, and it is so with the hydraulic press. Give what thickness we may to cylinders—to boilers, to tubes—yet iron, and copper, and brass will yield to these forces sooner or later. The question as to the limits of animal Mind-force passes over, in like manner, into the department of physiological problems relating to the tenacity of the tendinous cords, the strength of the fibrous structure of muscles, and the lever-power of the bony tubes which are the fulcra. The animal mind acquires, unconsciously, a perception of the limits within which it should confine its intrinsic energy. But this prudential consciousness of its organization is lost sight of in cases of extraordinary excitement or of peril of life, and also in moments of phrensy or delirium. Under some of these abnormal conditions, the animal force shows itself to be five or ten to one greater than its ordinary amount.

331. An approximate estimate of the intrinsic force

of the animal mind might be obtained by considering the locomotive speed of any animal as affording an indication of what it is in itself. Thus, if the extreme length of the animal from tip to tail, or the extreme length from tip to tip of the wings, be taken as an integer of space, then it may be asked as to each species, How many times in a second does the animal repeat its length when he is moving at his utmost speed? A race-horse does this, perhaps, ten times; a greyhound fifteen times; some insects—crawlers—thirty, fifty times. Swimmers and skaters—fish and some insects—several hundred times; the speed of some of the infusoria is in a vastly higher proportion as related to their size.

332. A general inference derived from facts of this kind would, as we have already said, support the conjecture that that intrinsic force, of which the locomotive speed of an animal is the exponent, is not directly as his size, but *inversely* so. This supposition would imply, as a general principle, that it is almost uniform *intrinsically*, or that the *germ* which is allotted to different orders and species differs much less than in the ratio of their comparative dimensions.

333. It more nearly concerns our present purpose to give the clearest possible expression to what we mean when we allege in behalf of this intrinsic Power an initiative prerogative, which we assume to be the prime characteristic of Mind and its First Rudiment. But, to give all the distinctness that is attainable to such a statement, we must go in quest of another rudiment, and we shall then see how the two come to a bearing one upon the other, and thence we may learn something more concerning each.

334. Although, as we have said, we know nothing of elements *in themselves* or *by themselves*, we may know much concerning them in observing how they work when in combination. The Physical Sciences are occupied exclusively with these *relationships* of elements or of forces, not at all with the elements themselves. It is no wonder, therefore, if the same be true as to Mental Philosophy: its primary facts, like those of the material world, are impenetrable mysteries; its secondary facts are what we have to do with, and these are intelligible.

335. We have said (55 and 243) that *because* Mind takes a bearing upon Matter, Mind and Matter are two natures, not one. And then, what is parallel to this, that *because* Matter takes a bearing upon Mind, which in this respect is passive, therefore Matter and Mind are two natures, not one.

336. As much as this must be assumed before we can lay the foundation stone of a Philosophy of the Mind. In granting it, we go no further upon conjectural ground than we do at every step in prosecuting the physical sciences. If we hesitate to allow this first step, we can no more make progress than we can in geometry after refusing to assent to its axioms.

337. Power must be claimed as the distinction of Mind when animal life is brought into comparison with vegetable life. Its second rudiment is its sensibility toward certain properties of matter; this is, therefore, a passive or negative quality, even as the first is active or positive.

338. We should here guard ourselves against the besetting illusion which impels us so often to seek in

the etymology of words what can never be found there —some insight into the hidden nature of the things which words symbolize. We may be tempted to ask what the meaning is of the word here employed—*Sensibility*, or its derivatives, or its synonyms; or of any other words which we may think more significant than these. But we shall wring nothing from the lexicon that will afford us a particle of aid on this ground. Just as well might the chemist, in search of elements, take the printed labels from his drawers and bottles, and put them into his crucible, as we, when in search of facts in Mental Science, open the dictionary, or go on to inquire what may have been the usage of the best writers on these subjects; such inquiries can affect nothing but the small proprieties of style.

339. The words we use, be they what they may, must indicate just this fact, that our consciousness includes what we know to be not of the Mind itself, nor to arise out of it, but to come in upon it from abroad, and that over *these* elements of its consciousness it exercises only a limited control. The mind knows itself to be related to a world which presses hard upon it in several definite modes, and from which pressure it has no power entirely to protect itself, even when that pressure has become painful.

340. But, then, this passivity, this involuntary consciousness toward the outer world, is much modified by the very structure of the organs of sensation; for, in truth, these organs, although we think of them as the inlets of what is extraneous to the Mind, yet serve as its *defense* also—as its coating against these stimulants, so that, except at certain well-defined points,

and under rigid conditions as to the intensity of the impression, Mind is fenced in against the external world.

341. The most notable instance of this defensive economy is presented in the organ of sight. In its relation of sensibility to the undulations of light, the Mind couches in its den behind its two windows, these being of very small diameter; and they are not only furnished with curtains, but are protected also with shutters and fringes in the most jealous manner. The same style of caution, though not to the same extent, attaches to each of the organs of sensation; and thus an indication, if not a direct evidence, is afforded of the truth, that the passivity of Mind toward Matter is intimate, and intense, and immediate, and such that it could be sustained no otherwise than under conditions of elaborate caution and of much abatement.

342. The active rudiment of Mind as related to Matter, through the muscular system, has this advantage, that it may, in most instances, regulate for itself the intensity of the encounter. The solid resistance of bodies, and their *vis inertiæ*, and their gravitation, are met only in such degrees as is proportioned to the muscular tenacity and the safe tension of parts. It is only in exceptive cases, therefore, that this due measure is ever exceeded, or that any injury to the organization is sustained.

343. As to the other senses—the five, as they are usually accounted, or six—they are so related one to the other, and are so related to the central consciousness, as to induce an incessant interaction between the active and the passive elements of the Mind; and it is

from this interaction, and directly by the means of it, that the personal consciousness—the reflex life, the centralization of thought—is developed, and that it comes to be the habit of the Mind.

344. This process of development may be followed through its stages in this manner:

345. Vision takes place at the two extremities of a line which forms the base of a triangle, whereof the object in view is at the opposite angular point. The inclination of the orbits of the two eyes is, therefore, perpetually needing to be adjusted to the varying distances of objects. This incessant adjustment, although we are ordinarily unconscious of it, is, in fact, voluntary, as we find whenever an unusual case of vision presents itself. Being, as it is, voluntary, it may be regarded as that initial lesson in the learning of which the active rudiment of Mind accustoms itself to its life-long companionship with its passive rudiment. A conception of things external, *as external*, is the product of this habitual relationship of the one to the other.

346. Every change of place, either in ourselves or in the things around us, offers to the eye a new image; but then, as the change takes place gradually—slowly perhaps, and as we witness it in progress from one instant to the next, we assign these successive pictures to one and the same external object. And thus it is that another step is taken in that process which gives us single concrete perceptions, which we accept as the result of many successive sensations. This process develops the personal consciousness, for it is the EGO that is thus gathering in and holding in store

for after purposes these perceptions, or these notions of things existing apart from ourselves.

347. It may well be doubted whether any repetition of simple organic sensations, if they were not thus gathered up and compacted, would ever awaken that reflective consciousness which is the life of our mental life. This awakening is the fruit of the incessant play of the mind as an active principle upon its passive rudiment—its sensibility toward the properties of the material world.

348. This process is greatly accelerated when the sensations of one organ are brought into combination with those of another, as, for instance, when the ear and the eye come into agreement respecting any object as the one source or cause of two kinds of sensation. So it is when a musical instrument, seen, is recognized as the source of the sounds we are listening to. Sensations of sight are then united with sensations of hearing; and the two kinds, centred upon one object, give form and fixedness to our conceptions of the external world. We come to think of all things around us not so much as the causes of certain impressions made on the senses, but as realities, existing independently of us, and irrespectively of our knowledge of them. We gain acquaintance with the objects of the external world sometimes by one sense alone, more often by two or three in combination; and we acquire our knowledge of them under so many various conditions, that the *things* are thought of much rather than the particular mode in which they may have come into the place they occupy in our minds.

349. But it is true in mental as well as in me-

chanical philosophy, that action and reaction are equal. In thus conceiving of the objects around us apart from any thought of the means of our knowledge of them, a reaction takes place upon ourselves. We come to think of the EGO as an independent and integral existence, which stands in an opposed relationship toward all these outer objects. Just in proportion as our notions of the world around us are thus congested, and are regarded as objects to which we and our welfare are related, so does the personal consciousness become a distinct feeling—a fixed habit of the intellectual life. The reflex life is thus developed, and it becomes the ground and reason of our course of conduct and of our individual feelings. This development—this thought of ourselves—on the one side, and of all other things and persons on the other side, is a distinction of human nature as compared with the natures around and beneath the human.

350. Simple *sensations*—those, for instance, of sight and hearing, of touch, and taste, and smell—come and pass away, and would quickly be lost to consciousness. But *perceptions* gathered from sensations, and especially such as combine the evidence of two or more of the senses, are persistent and adhesive, and they constitute the mind's stock of materials, to be made available in all kinds of intellectual and moral action.

351. As to these stores of thought, we may adopt the opinion that the brain is the repository of them; or we may believe that the mind is the real home of all thought, the brain acting only as the medium of transmission. Our present purpose does not require a decision of this question. In truth, no certain solu-

tion of the problem can be pretended, for it is one of those secret things toward the discovery of which we possess no indications.

352. The indisputable fact is what we have now to do with, and it is this: That conceptions of the things of the outer world—we may call them pictures—images —ideas—these conceptions or reiterated sensations are in course of being accumulated perpetually; the fund is every moment on the increase; and, by the spontaneous combinations which are taking place within the mass, it increases itself, as one might say, at the rate of compound interest.

353. This fund of images or ideas is in a state of incessant movement or of internal convolution, so that the mind, when itself it is in the least active condition, is presented with scenes perpetually shifting, coming up, and passing on, and disappearing, unsought for, and often unheeded.

354. It is true that there are laws of association in conformity with which these *exuviæ* of our perceptions present themselves in series to the mind. These laws have been specified in some such manner as this: there is the law of chronological order, or proximity in time; the law of juxtaposition, or proximity in place; and the law of frequency of recurrence; the law of intensity as to the attendant emotions; the law of artificial connection by means of habits; and several other modes of adhesion might be named.

355. But what we should note is this: that the mass of these treasures of thought, being, as it is, so great and so multifarious, and the laws which prevail in determining the sequency among them being so many,

the separate objects present themselves in a manner that bears all the characteristics of sheer fortuity. To the mind it is as if chance, in defiance of law, prevailed in this department.

356. This eddying current of ideas runs parallel always with the more uniform current of sensations, coming in from the real world around us; and as these are usually the more potent, they turn it from its track and give it a new direction, and impart to it still more the aspect of fortuity. And yet it is from out of this ever-shifting mass of disorder that the human intelligence obtains the most admirable products.

357. The animal mind in many, if not in all its lower ranks, is, like the human mind, retentive of the impressions it receives through the senses: this we can not doubt. The dream of the dog, which we may almost see as we watch his nervous sleep, indicates this fact. So does his faculty, and that of other domesticated animals, of acquiring habits show it. Retentiveness of the recollection of places, remarkable as it is in some animals, can be understood only on this supposition. But in the inferior orders this faculty of storing perceptions completes its purpose within very narrow limits, and it fails to develop any powers of Mind so as to become a source of free energy. In the human mind, at the moment when this power wakes up and steps forward in its own manner, the scene changes—the phenomena of consciousness take quite another character; and that which is fortuitous, as well as that which is bound by law, gives way to that which shows its relationship to a determinative principle.

358. We can scarcely misunderstand the purpose of this structure of the human mind which brings its active rudiment, or, we ought to say, *itself* into contact with this great store of materials, confusedly heaped together as they are. This intention may be traced in following the progress of the mind from its earliest period until its faculties have become consolidated.

XI.

THE POINT OF DIVERGENCE OF THE HIGHER AND THE LOWER ORDERS OF MIND.

359. THE human infant, from its first days of sentient life, gives evidence that preparations are, in this instance, making, not merely for the development of faculties of a high order, but for giving the greatest breadth to the field upon which these faculties are to come into action.

360. The actions of the animal (inferior orders) have their rise mainly in its instincts, appetites, wants, as these are related to the objects present to the senses from one moment to another. Yet it is not exclusively so; for there is a class of actions which appear to be prompted by ideas or images furnished from what may be called the stores of the brute imagination. The reality of this species of action may be admitted as more than probable, if not certain.

361. But not at all questionable is it that, with man, action arises from this source in a large proportion of instances; and thus it is that, while the incitements of volition are greatly multiplied, the energies

of Mind come to take effect with more freedom than otherwise they could do.

362. The human infant, while under the discipline of nature, and long before maternal teaching commences, yields itself to the constant succession of sensuous impressions; it is receiving, imbibing, assimilating the greatest possible amount of sensations: while awake, this passive process goes on without ceasing; and during sleep—if we may so far surmise—the accumulated stores are turned over and over, and are commingled in endless modes of combination.

363. In proportion as infancy opens itself into childhood, emotions of all kinds become more vivid, so that this operation of stocking the mind comes to be more and more an active process. MIND is now waking up, and scarcely any thing takes place within its prospect with which it does not in some way concern itself. Thus it is that sensuous ideas, inasmuch as the accompanying emotion is more vivid, and also because the mind itself, at this time, mingles itself with every thing, are in themselves more and more distinct and more *persistent;* they claim more attention, and they receive it.

364. Throughout the years of childhood, these impressions, these images or ideas, are tending to fall into chronological order, and in doing so, they give coherence to the consciousness of personal identity. Man is not man until the moment when he learns to look upon himself from the historical point of view. Whether any analogous process of individualization takes place among the lower orders can not be known; yet, if it does, probably it stops short at a point where it is a mere rudiment.

365. Childhood, in its onward course toward maturity, passes into an intermediate condition, the characteristic of which is this: that the mind itself, or, if we choose to say so, its active rudiment, is much in excess of the appetites, wants, desires of the animal nature. Man, at this spring-time, has very much more of a vague impulse to act than of any definite motive for acting. This, however, is a disproportion which continues only for a brief period; the equilibrium is soon restored, and the excess thenceforward comes to be on the other side.

366. But during this brief period, whatever may be its date, preparations are making, under the discipline of nature, for the development of MIND in man of a far deeper meaning than has any place in the animal orders around him. It is now that he is learning to take his position as possessor of a freedom apart from which there could neither be intellectual expansion nor moral progress.

367. Throughout this transition-period, the conduct, or, as it is conventionally called, "the behavior" of those who are passing through it, stands open to frequent criticism, and to rebuke too on the part of senior minds; for it has become capricious, wayward, inconsiderate, or, to say all in a word, "thoughtless." But "thoughtless behavior" is not good in itself; it is often in a high degree inconvenient or even dangerous, and therefore it should be brought under control. And yet it should not be so criticised or be so controlled as that the intentions of nature at this moment should be defeated. If, through an excess of parental wisdom, or by overdone discretion, nature is thwarted

at this time, the after-man will be so much the less the man as he has been brought into the condition of a machine.

368. In the absence or during the abeyance of powerful animal impulses, and while there is a large suggestive fund of ever-shifting imaginations, as the incitements of volition, and an exuberance of energy which must be spent, the human mind is coming into the use of its inherent liberty; it is tasting the enjoyment of its birthright—its sovereignty in relation to motives of all kinds. Among these motives, whether they may be stronger or weaker in themselves, it takes its sport, refusing to be enthralled by any, and spurning every despotism: it is learning to be free.

369. If we can bring ourselves to think of human nature from a physical point of view only, and if we simply consult consciousness, and if, with independence of thought, we observe facts, we shall admit, on this ground, the reality of the distinction which is claimed on behalf of the human mind when it is brought into comparison with the animal orders around us. These orders, indeed, enjoy a liberty which places them far in advance of the ranks of vegetative life, but then beyond this limit the human and the animal mind cease to run abreast.

370. It can only be on some purely hypothetic ground—perhaps theological or metaphysical, or perhaps merely logical—that this distinction will be called in question or that it can be denied. With such grounds of exception we need not now be concerned. Human nature and the brute nature *diverge at this point*, and thenceforward they are separated by an ever-widening interval.

371. In those classes of animals whose appetites are the most vehement and peremptory, volition, if it be not all of one sort, is nearly so, and the same, almost, may be affirmed of those unhappy beings in human form who have long surrendered themselves to the tyranny of animal appetites. But it is far otherwise when human nature expands itself under favorable conditions, and when culture, intellectual and moral, comes in to preserve a due equilibrium among its various energies.

372. In this case—and we need not now include any ingredients of a religious kind—in this case, volition takes place in more modes than one, as thus: Sometimes, and often it is so, the immediate objects to which instincts or appetites stand related in the order of nature are presented to the senses, and they are at once pursued and possessed. Sometimes, and it is not seldom, even when the more direct incitement is present, volition takes its rise, not in this elementary manner, but at the suggestion of some notion, or feeling, or idea, which has come up at the moment—perhaps unsought for; most often it arises in accordance with a law of habit, or as the consequence of some moral association. Sometimes, and by no means in rare instances, volition takes its rise, even while strong influences are full in view, in a manner the explication of which must involve the assumption of an hypothesis of some kind.

373. We may content ourselves with an *à priori* hypothesis, and give assent to the metaphysical conclusion, that as every event must have its cause—animal volitions included—the cause of a volition, in ev-

ery instance, is, and must be, a motive *foreign to the voluntary power, or anterior to it;* and that, in every such instance, the strongest among several motives then present to the mind always prevails: it *does*, and it *must* prevail, because, as compared with any other motive, it proves itself to be the efficient one. To obviate any objections to which this formal demonstration may be liable, contradicted as it is by our consciousness, it may be affirmed that the actual motive, in any case, may be of so attenuated or evanescent a kind as that it is quite unperceived by ourselves; we are either unconscious of its presence, or we underrate its powers; or perhaps it is of such a kind that we avert the eye from it, and refuse to recognize it as the real reason of our conduct. Let it be so; and, without doubt, there is a large class of volitions which owe their rise to invisible influences of this very kind.

374. But if consciousness be appealed to—hypothesis apart—it will attest the fact that there is a class of our volitions which is not included in those now mentioned. Whether, if we could penetrate to the adytum of human nature, we should find the functions of the mind to be what metaphysicians affirm them to be, or not, yet, in fact, consciousness—in human nature—supports the belief that there are volitions which are not peremptorily swayed or are not determined by the stronger among motives; there are volitions which, in a sense distinctive of the human mind, are free.

375. So long as our consciousness, exempt from sophistications, retains this *belief*, it constitutes the saving element as well in our intellectual as in the moral constitution. While man *believes* himself to be

possessed of a power which is irrespective of the absolute sway of instincts and appetites, whether of a lower or of a higher order, and which is superior to them all, so long does he retain in his grasp the spring of progress, advancement, renovation, and every good which the limits of his nature may bring into his prospect of futurity.

376. It is a principle to which we may, with little risk, commit ourselves, that if A BELIEF, whatever it may be, takes its place as a constituent among the functions of the intellectual or moral life, and if it be essential to their healthful exercise, such a belief is not an illusion, but a reality. So it is as to our instinctive belief of the objective reality of the external world, and so, also, as to the constancy of nature. The belief, instinctive as it is, of the absolute independence of MIND in human nature, may, in like manner, be assumed to be well founded, *because* it is needed as a function of our intellectual as well as moral nature. The early developments of human nature are manifest indications of the place that is to be assigned to this belief in the mature man.

377. Often does it happen that the boy, full of life, of fun, and of folly, when he is attended by his pet friend, his dog, or his pony, may suffer a disadvantage in the eye of severe wisdom; for, in truth, the quadruped shows himself, on many occasions, to be the more discreet of the two, the more considerate, and the more thoughtful. But if the intention of nature be taken into the account, the advantage will appear to be immeasurably on the other side. The quadruped obeys and follows the bare reason of the case, so far as that

reason comes within his view; the infant man may have a wider prospect of this reason, and he may see it more clearly, but yet he spurns it: he asserts his prerogative to see reason and to reject it. The animal comes early into possession of all the truth and all the wisdom of which he can ever make himself master; he reaches it on a straight path, and a short one. But man is destined to acquaint himself with truth and wisdom to an extent that is incalculable, and to reach it on a path that is circuitous and devious, and upon which he could not set a step hopefully if, with him, the law of thought and volition were peremptory and determinative, as it is with the brute orders around him.

378. It is when we bring human nature, under its different aspects, into comparison with the natures around us, that we see how immeasurably far in advance of them is the position which it occupies. When the two orders of Mind are thus placed side by side, it becomes manifest that to the one there belongs a *degree* and a *kind* of power of which the other possesses barely a rudiment.

379. Aided by this comparative method, we shall the more clearly see that while, as we have already affirmed (216), the liberty of the human mind is the necessary condition of a moral system, it is also, and in a not less absolute sense, the necessary condition of intellectual development, and of those advancements which raise the civilized man so far above the level of man in a savage state.

XII.

INTELLECTUAL EMOTIONS AND THEIR RESULTS.

380. In illustration of the intelligence of the animal orders, and in proof of the appliant reasoning faculty that is possessed by certain species, especially by the elephant, the dog, the ape, volumes of instances are at hand. But as to this body of evidence, ample and various as it may be, as well as curious and significant, the whole of it has the fragmentary character which we designate by the term *anecdote*. These hundreds of instances are all of them single incidents in the biography of this or that spaniel, or elephant, or monkey. The story begins and it ends with the individual pet that has so signalized its wit or its providence.

381. But that which we have to appeal to in illustration of the intelligence of man is not a book of anecdotes, but it is a copious history; it is a history in the course of which, although illustrious individual minds head the chapters, yet they always do so as the teachers and leaders of communities and nations. This history, which dates its beginning from the earliest developments of reason, is now in mid-course, and it shall reach its consummation, if ever, in an age that is immensely remote.

382. What we have to seek for, therefore, when, on the one hand, this volume of anecdotes, and, on the other hand, this great history, are before us, and are

waiting to be disposed of, according to the admitted usages of scientific generalization, is not to show that reason in the brute orders and reason in man are powers generically different, which they are not, but we have to discover what those conditions of the reasoning faculty are which, being present in the one case and absent in the other, render human reason a germinant power, tending always toward products which are yet to be realized, while brute reason reaches its end and is spent in the immediate occasion which has called it forth.

383. Brute reason is called forth at the impulse of some motive which dies out at the moment when its single purpose has been accomplished. Human reason is also called forth in this same manner in thousands of instances; but, beside and beyond this, it obeys the guidance of tranquil emotions which, instead of finding their end in the first occasion, gather strength always as they go forward, and which at length form themselves into habits of the individual mind, and so acquire the force of a prevailing disposition: these emotions give direction to the faculties and to the tastes which they evoke and develop.

384. We have affirmed, on behalf of the inferior animal orders, that they possess a pleasurable consciousness of melody, and perhaps of harmony, in sounds, and that they have a consciousness, also, of beauty in forms and colors. So much of intellectuality as may be implied in this sensibility ought to be allowed to them. Facts, the meaning of which can scarcely be thought questionable, sustain this belief; but there are no facts (or we recollect none) which would indicate

the presence of that kind of germinant intellectuality of which the infant man gives evidence almost from the earliest days of his becoming percipient toward the world around him.

385. As soon as the infant begins, at his own motion, to amuse himself, and to create for himself a theatre of delight out of any fragments that come within his reach, he does so in a manner to which nothing in the sports ot young animals has the least resemblance, and which may be taken as a sure prognostic of that boundless intellectual ambition which will find its limit nowhere short of the circuit of the stellar universe, nor be content even there.

386. A pleasurable consciousness toward the objects, the forms, the colors, the movements of the world around us, may be intense, as perhaps with some animals it is, and yet it may come and go, leaving no trace of itself or any product. But such a consciousness, although much less intense, yet, if it links itself with the reason or with some moral sentiment, may become the spring and beginning of interminable advancements. On this ground we soon find ourselves diverging rapidly from the parallel of the animal mind.

387. The most knowing of dogs or of elephants is left far in the rear on the field of reason by the human infant that employs itself in sorting a lapful of beans by their colors or sizes, and is seen to be arranging them in lines and circles. The baby experimenter, lost as he seems to the things about him, has caught hold of a clew of abstraction, or of resemblance, or of contrast, or of analogy, and, if not now, yet in some

time future he will follow it with ardor, even though it lead him as far as the outskirts of creation.

388. The human infant, with his marbles, or his beans, or his shells, or his petals of the tulip, or his bits of earthenware spread out before him, is, we have said, so occupied in a world of abstractions as to be lost to the things around him. Here, then, we should note the early development of a faculty from which all other developments take their rise—the power, namely, to take up and to follow any single line of perceptions, or any single series of ideas, while other simultaneous impressions on the senses are disregarded or are held in abeyance.

389. This faculty—a primary distinction, as it is, of the human mind—implies, *first*, but not merely or chiefly, the power to follow one series of perceptions among several which may be of *equal force*, but for attending to which there may be some especial motive, as when we listen to footsteps in a dark and stormy night, which may be those of an expected friend or of a dreaded foe.

390. But beyond *this* discretive power, and of much more significance, is that which enables us surely and easily to take up some one series of sensations from out of a number that are all equally intense, or are nearly so, and in regard to which no appreciable motive attaches to one rather than to any of the others.

391. The examples are such as these: In a concert of many voices, the several voices being of nearly equal intensity, regarded merely as organic impressions on the auditory nerve, we select one, and, at will, we lift it out, and disjoin it from the general volume of sound;

we shut off the other voices, five, ten, or more, and follow this one alone. When we have done so for a time, we freely cast it off and take up another. In this manner to listen *discretively* does not imply any extraordinary nicety of the ear or any rare power of attention. Thus it is that a narrow line of perceptions belonging to one sense may be pursued, to the exclusion not only of many impressions upon the same sense, but of many distracting impressions upon the other senses, as of the fair forms and gay colors of the company around us.

392. A like discretive power is exercised in the sphere of each of the senses; thus it is that the experienced cook judges not only of the "far too much," but of the "much too little" of some one ingredient in the compound upon which the epicure, his master, shall bestow his commendation. So it is in the sense of smell, and so of touch. As to the muscular sense, it should be considered as differing essentially from the sense of touch. This muscular sense is, in an eminent manner, discretive; for it is able, among many conceptions as well as among perceptions, to fix upon one, even when the neighboring perceptions differ from it only in the smallest degree. For instance, a practiced corn-dealer takes in hand, at random, an ounce or two of wheat, barley, oats, and closing his eyes, and poising this indefinite quantity a while in his hand, he will tell you confidently, and within half a pound of the truth, what will be the weight of a bushel of the same sample. In this nice operation the mind is bringing into comparison its recollected feeling of the weight of a sample of forty pounds to the bushel, and of forty-

one, and forty-two, and forty-three, and forty-four, and forty-five; and then it hypothetically compares the weight of the quantity now in hand with each of these approximate remembrances.

393. Many instances, usually adduced in illustration of the discretiveness of the visual organ, belong rather to physiology than to the science of Mind, but there are others which are quite proper to our present subject. To fix attention upon a single object among many that lie within the field of vision is no doubt an act of the mind, but it is one of a class which may be left to the physiologist, who will give it a place in his chapter upon the eye.

394. Technical habits, and technical faculties in seeing, such as those of the painter, are nothing more than eminent instances of what the human mind, generically, is capable of when much culture has been bestowed upon single powers. We take up, then, the instance of the educated and practiced artist (the term is here employed in its highest sense) in illustration of certain powers of mind which are distinctive of human nature.

395. Take such an instance as this: To the man who is born for the fine arts, whether painting or sculpture (and now let us say the former), many tranquil and yet intensely pleasurable emotions attend the perceptions of sight. These emotions find their objects in those three conditions of the visible world under which objects are pictured, as one blended sensation, upon the retina. These three conditions are those of form or contour, of light and shade, and of color. The separation of the three is an acquired or technical

ability, for undoubtedly the three are neither distinguished, nor are they discretively held apart, in the mere organic sensations of sight.

396. But the man who, first by special endowment of nature, and then by habit and culture, has become keenly alive to these three elements, finds it easy—in truth, he is doing it perpetually and almost unconsciously—to set off one of these elements from the other two, and to regard it, pictorially, apart from the others; then to dismiss this one and to take up another, and so to pass rapidly from one to the other, and to combine any two, rejecting the third; and then to bring together the three in some final combination. The painter, we may suppose, is looking upon a group of persons gayly attired, and assembled under full sunlight. In this group there may be forms that are graceful and beautiful in the sense of Phidias or of Raphael; there may be forms that are picturesque and full of character in the sense of Teniers or of Wilkie; then there may be combinations of colors, rich and deep, in the sense of Titian or of Rubens; then there may be striking effects of light and shade in the sense of Rembrandt. These very same forms, and these colors, and these lights and shadows, are falling alike upon the eyes of all spectators, but it is alone the painter's eye which has learned to set off element from element, and it is he alone who, in successive moments, sees *form* and *outline* as if there were no colors, and no light or shadow, and again sees *color* as if there were neither contours nor shadows, and yet again sees *light* and shadow quite apart from outline and from color.

397. In this instance, and it is only one out of many that might be adduced to illustrate the same principle, what is noticeable is this, that the human mind, at the impulse of a certain class of pleasure-fraught sensibilities or tastes, and under the guidance of habitual emotions that are of a tranquil kind, exerts its power of abstraction and of synthesis in and upon the groundwork of its merely organic sensations. This pleasurable consciousness is equable in regard to the diverse elements that may be in view; the mind is excited, but it is not swayed or determined; its power is stimulated, but it is not constrained or necessitated, and it takes a free course over the field of its ideal treasures and of its perceptions with the most absolute sovereignty.

398. That which is characteristic of this class of emotions is this, that they are *non-emotional* in any such manner as are those which arise at the impulse of the appetites, or the social sentiments, or the irascible passions. They do, indeed, deeply move the mind, and they call out its latent faculties, but they do so always in a measured degree; the force with which they act may be intense, but it is never impetuous or tumultuous.

399. A vivid pleasurable sense of resemblance, and of any sort of symbolic meaning, when it presents itself under and amid diversities, possesses especially this characteristic intensity with serenity. Nevertheless, although it be unimpassioned and silent, this feeling is one of the most productive of those energies which distinguish human nature.

400. At a very early age, a child of vivacious tem-

perament gives evidence of his sensibility toward objects of any sort which, on the ground of, perhaps, a very remote resemblance, call up the recollection or image of some object that is not then present. A stain upon the wall, a momentary form of the clouds, or the rudest limnings of the mother's pencil, are hailed with glee when they are looked at as likenesses of a face, a figure, or as the intended portraiture of a cow or horse. No approach to any such recognitions, no indication of any such sensibilities, are discoverable in the actions or habits of any species of animals. It is true that a dog or a cat may, for a moment, be deceived by a picture, but never is it attracted by a rude, an imperfect, or a sketch-like resemblance of objects.

401. In these instances, full of meaning as they are, what is it that takes place? Whence springs the pleasure which we see to be indicated when they occur? It may be well to inquire. Let the example we take in hand be one of familiar experience. In a woodland ramble—a new walk, perhaps—we come up to the gnarled trunk of an oak which has stood leafless through the summers of a century. It seems to bestride the path as a giant; it stretches out savage arms, as if to forbid our advance; its knotted head exhibits some strange similitude of features—eyes, nose, and wide-extended jaws; we gaze a moment in surprise, but the next moment find a vivid pleasure in contemplating this wild caricature of humanity. Time, helped by the winds, and heats, and frosts of centuries, has been the artist in this case; no knife or chisel has touched the work.

402. In this case we may assume that there is quite

enough of likeness to attract the eye and to fix attention, and yet there is also an extreme unlikeness in every thing but just this rude resemblance of form. The resemblance which we recognize is that between the actual object now in view and some conceptions of gigantic or monstrous humanity, which this form, at the first aspect of it, has evoked. With a sudden force, the object before the eye has awakened the conceptive faculty; various ideals of the human figure are crowding up at this summons, and we find a pleasure in imputing each of them, in its turn, to the rough mass before us.

403. A fortuitous resemblance of this sort has (might we not say so) fallen like a spark upon the ample stores of the conceptive faculty, and these, rich and various as they may be, are quick in furnishing materials for almost endless suppositions, each having its meaning, which we impute to the object before us. The pleasurable sense of resemblance and of analogy, when once it has been evolved, seeks on all sides for its proper gratification, and it finds them in abundance. An emotion of a kind which is purely intellectual, and which, however intense, yet never becomes distracting or turbulent, and which never induces exhaustion, forms itself gradually into a habit of the individual mind, and, as such, it is the prolific source of imaginative art and of poetry.

404. Philosophy—not, indeed, the empirical knowledge of utilities, but that which is the product of the highest thought—philosophy takes its rise from a similarly rudimental class of emotions. Noiseless they are in their earliest developments, and they are dis-

tinguished always, even when they have acquired a prevailing momentum in the character, by their quiescence.

405. We are accustomed to think of the great men who have led the way in philosophy as men gifted by nature with pre-eminent powers of reason, and of reason only; but we do not so usually keep in view that other endowment, apart from which such powers would have remained latent, namely, an intensity of those emotions which we designate as intellectual. To the man who from the ranks raises himself to a seat among princes, or who becomes a prince among princes, we attribute not only great powers of mind, but a restless ambition, with its cognate vehement impulses and its lawless passions. Meanwhile we imagine the philosopher to be so constituted as that mere reason is the whole of *his* nature; yet, in truth, the difference between Alexander and Aristotle, between Cromwell and Newton, between Napoleon and La Place, or D'Alembert, is not that of mental power *with* or *without* emotional energies, but it is between one species of emotion and another; it is between impetuous and stormy passions on the one side, and deep sensibilities toward universal truth on the other side. In pursuit of truth there is a steadfast earnestness, such as may sustain the severest labors.

406. The arts of life and the applicate sciences have their rise in the urgent necessities of our animal well-being, but philosophy springs from a far higher source. Practical science and philosophy, it is true, must not be disjoined, for they should minister one to the other, yet should they ever be distinguished as to their origin and as to their true intention.

407. The common phrase, "the love of truth," is somewhat vague, including, as it does, moral sentiments along with intellectual tendencies or tastes. What we have just now in view is a feeling or impulse that is paramount in some minds, and which has no immediate bearing upon moral principles or dispositions. It is the impulse to become cognizant of whatever is true and certain in the world of causation and in the region of abstract relations.

408. The pleasurable sense which already we have affirmed to be attendant upon the discernment of resemblances or of symbolic analogies is so vivid that it well sustains any labors that it may prompt us to undertake for its gratification. But the higher impulse which we have now to speak of wears a much more severe aspect; it is, indeed, deep and irresistible, and it abounds in fruits of enjoyment, yet it is such as will be needed to sustain the arduous, and painful, and unrequited labors of a self-denying life.

409. The true philosophic passion—if passion we may call that which is *unimpassioned*—is a far more rare gift of nature than is the sensibility to resemblances above spoken of; or we should say that it is rare as conjoined with a corresponding vigor in the reasoning faculty; and it is only when this passion for truth is conjoined with force in the intellect that it can become noticeable.

410. Mathematical science, concerned with the relations of number and extension, had its rise, as we are told, along with the mechanic arts, on the level of the immediate necessities of life, and at all times has it been pursued at the instigation of various secondary

motives, none of which come just now within our prospect. But it is certain that, if it had listened to no prompting of a higher kind than this, it would never have stretched itself out so as to embrace, as it now does, the philosophy of the heavens.

411. Mathematical science, although born and nursed for a time among the arts of life, did not long fail to draw to itself a certain class of minds, in the view of which its remoter revelations—aways bright and sure—kindled a species of ardor which thenceforward was to rule the intellect and to govern the life of the man. There is, perhaps, no intensity of the mind more intense, or more exclusive, or more determinative than that which leads a certain order of intellect onward, and onward still, on the ascending path of mathematical abstraction.

412. There is good room to ask whether the peculiar energy of what might be called the mathematical soul does not carry with it a deep meaning, and declare the truth of man's destination at the first, and of his destiny still to take a place and to act a part in a world of manifested truth and of eternal order. Do we venture too far in saying that, when mathematical abstractions of the higher sort take possession of a vigorous reason, there is placed before us a tacit recognition (one among several, all carrying the same meaning) of the fact that the human mind is so framed as to find its home nowhere but in a sphere within which the absolute and the unchangeable shall stand revealed in the view of the finite intelligence?

413. This at least is certain, that, on the low levels of this cloud-girt, troubled, care-worn world, wherein

purposeless contradictions and futile controversy, wherein strife and sophistry, prejudice and folly, and sinister influences, mar so much our comfort in the pursuit of truth, and prevent, so far, our peaceful fruition of it—it is certain that the uncontradicted conclusions and the unchanging realities of mathematical science afford a rest, and a sense of safety, and a refuge, which nowhere else can be found among the things of earth.

414. These recommendations of mathematical philosophy, which are quite peculiar to itself, bring to view with distinctness the operation of the Intellectual Emotions in carrying the human mind ever upward and forward toward a stage of thought that is immeasurably remote from that narrow boundary within which reasons of utility exert their influence.

415. A theorem demonstrated is not so much a single truth made good as it is an indication of truths which are yet in advance of itself, and which will come to take their bearing upon it. A theorem established is always a germinating principle, and its powers wait to be developed in the course of the process which is to follow next in logical order. A method of reasoning, the validity of which has been proved by the certainty of its results in several of its applications, is a power that has been put into our hands, and which we must hasten to apply to other purposes. A problem solved is the guarantee of our success in attempting the solution of problems still more difficult, and which stand in front of our present position.

416. It is thus that mathematical science evokes and feeds the reason to an extent that is not easily

estimated; it does so by quickening those emotions that are, in the fullest sense, intellectual, namely, the instinctive desire to know—the tranquil acquiescence in what comes to us, without a shadow of doubt, as true—the impatient desire to use any power of which we have lately possessed ourselves; and, not least, that deepest and most potent, that earliest born, and last to be relinquished of all our emotions, hope, and the ambition of progress.

417. So intense is the force of these purely intellectual impulses when they are called into play by the higher kinds of mathematical abstraction, that they avail to bear the human reason aloft into a region that has no connection with the wants or desires, real or factitious, of our animal or social well-being. Keeping scrupulously clear of exaggeration on this ground, let it be recollected whither it is that these same emotions, taking their effect in the sphere of mathematical philosophy, have now actually carried the human mind. Aided by instruments which the necessities of reason itself have called into existence, man, in these last times, has well demonstrated the homogeneousness of his mind with the Supreme Creative Mind, and he has done so on a field not narrow, for it is as wide as the stellar universe. There can be no irreverence—there can be no presumption in plainly stating a fact which rests upon evidence so clear and sure. Even if this same averment were made in terms still stronger and more comprehensive, we need not fear a rebuke on the part of Christian piety, for what we so affirm does but illustrate and attest the Biblical doctrine that "God made man in His own image."

418. It is not the faculty merely, or the force of reason, but it is reason vivified and stimulated by emotions or desires of a purely intellectual order that has enabled the mathematician to bring the remotest futurity of the planetary system within the range of his calculations. It is thus that man, whose individual life is but of a few days, has come to compute the celestial æons, and to determine the moment when this machinery, having at length reached its limit of stable equilibrium, shall reverse itself, and shall start anew in the recovery of its primæval order.

419. Intellectual emotions that are much the same in their elements take effect in a somewhat different manner within the region of physical philosophy, where it is not *Relation*, but CAUSATION of which we are in quest.

420. Far away from any regard to the utilities of common life, the philosophy of which now we are to speak takes for its subject or theme *Causation*, whether this be considered as invariable sequency only, or be thought of in a dynamic sense, as implying the presence of an efficient power, proximate as to the effect.

421. The desire to know, so powerful an instinct as it is of human nature, not only prompts us to acquaint ourselves with all forms of the visible world, and with all varieties of structure and function among organized beings, but also to become cognizant of CAUSES. This is a peculiar and a higher mode of the same instinct, and it is such that it claims to be considered by itself. In some minds the impulse is in such a degree paramount, and it so prevails over all

other motives as to become the one characteristic of the individual—it is the law of his existence.

422. The desire, which amounts to an impatience, to be cognizant of causes, and in which impulse philosophy takes its rise, is clearly to be traced up to that rudiment of Mind, or, we may say, to its own nature—to *itself*—as the first and only cause of which it has any direct knowledge.

423. Mind in its essence—Power—instinctively regards all things around it in the light in which they appear when seen from this central point, which, in an especial sense, is *its own point of view.* This first element of consciousness gives rise to an hypothesis of causality, or a supposition of some latent force in every instance in which a movement of any kind, or a change from one condition to another, takes place in our view. And thus, too, even as to those forms or conditions of things which are unchanging, or which appear to be so, the same feeling impels us to regard them under their historical aspect, and to go back to the moment, however remote it may have been, when they were not what they now are, but when they *became* such as they now are as the result of an efficient cause. Thus it is that the geologist inquires concerning the origin of primæval rocks.

424. A degree of restlessness, or an impatience, or feeling of perplexity, which is more or less painful, ensues whenever we are baffled, or are brought to a stand in our endeavors to ascertain causes. Amid feelings which thus far are not pleasurable, Philosophy comes to the birth; but at an early era after its birth it shows its assimilative tendency toward the brighter

elements of our nature. The pursuit of causation quickly becomes animated, and eager, and hopeful, in the sense of a healthful energy, the exercise of which is in the highest degree pleasurable.

425. The philosophy of causation, when it is adopted as the occupation of a life, and when it is pursued at the impulse of that intellectual emotion which strengthens itself by indulgence, sets the human reason forward on a course that can have no calculable end. Individual minds may indeed cease to go on upon this high road, fatigued by its toils; and it has happened once and again in the history of nations that certain races which had been illustrious leaders thereupon have lost their zest, have forfeited their honors, and fallen from their position. Nevertheless, new-comers, in an after age, have set foot on the same road; nor can we now imagine such an event as that the human family *every where* should at any future time surrender, or should cease to employ its prerogative of advancement on this ground.

426. The work of classification in bringing multiplicity into order, on the ground of visible resemblances or analogies, is a less rare development of that impulse of which physical philosophy is the product. Classification concerns itself only with what is visible and palpable; but Generalization takes little account of the exterior, or it never stops there: it goes down beneath the surface of things, and seizes, not resemblances of figure, but identities of powers or of laws.

427. We have already spoken (186) of the tendency of the mind to bring all things with which it concerns itself into a centralized arrangement *as related*

to its own faculties. This tendency shows itself in the rise and the advances of the higher philosophy. The ancient generalizations, which, if they were not wholly regardless of facts, yet dealt with the phenomena of nature in a willful and arbitrary manner, were all so many expressions of the centripetal direction of thought, resulting from the constitution of the mind. Each of those ancient theories of the universe which finds its place in a history of philosophy furnishes an instance that might be adduced in support of what we here affirm. The human mind not merely seeks to relieve itself from distraction by means of classification, but also, and with still more earnestness, it seeks to reduce causation to a scheme within which all phenomena shall arrange themselves, as if in a radial manner, itself at the centre.

428. The revolution effected by the spread of the Baconian philosophy, so far as that revolution ought to be attributed to the writings of Lord Bacon, did not contravene this tendency (for it would have set us wrong if it had), but it stipulated on behalf of Nature that she should ever be listened to before the centralizing process was set forward. Our modern philosophy, therefore, has this merit as compared with the ancient philosophy, that its generalizations are always held open to correction from facts, and thus it is under a continuous course of revision, the central point of human science approximating continually to the true and real centre of the material world; that is to say, the point where all causes or laws are converging, and are resolving themselves into the fewest and the simplest principles.

429. As yet, our modern philosophy is far from having brought itself up to the position that has been attained by mathematical science. This latter is a sheer product of thought, and the mind which has produced it is fully competent to dispose of all abstractions which it is able to note and to symbolize without risk of error. But the former has to do with those relations among the properties of the material world which spring from its hidden constitution, and which are, and which probably must ever remain, unknown.

430. Incomplete, however, as is our modern philosophy, it will continue to be filling up its voids and simplifying its deductions from day to day. It will do so, only supposing that the light of knowledge and that our civilization are not doomed to undergo extinction. It will thus constantly advance, *first*, because those intellectual emotions which are the spring of the higher philosophy gather strength, intensity, and animation from every instance of an achieved success; and, *secondly*, this progress may be spoken of as certain, because at length our modern philosophy has cordially accepted her true position as the interpreter of Nature, and nothing more. Human reason has renounced its fallacious ambition to deduce a philosophy from its own resources.

431. There remains, on this ground, to be noticed a class of intellectual emotions which, though they are of a somewhat lower bearing, are of no inferior importance in the economy of our intellectual existence.

432. A single phrase which should well designate the impulses now in view is not easily found. But in any case, if a sufficient number of instances are ad-

duced, so as to put out of doubt what is intended, the exact propriety of words and phrases will be of minor importance. What we are now intending may be spoken of as the Constructive Impulse.

433. Here again, and in a signal manner, the fact presents itself that the primary incitement which the human mind receives from the stern necessities of animal life does not stop when those necessities have been supplied; far beyond this point the movement goes on, waking up faculties which, instead of being content with the first successes, are thereby so much the more invigorated and emboldened, and which shall reach their boundary never, so long as another step in advance is not plainly impossible.

434. Those animal species that are constructive in their instincts start from a point some way in advance of that at which man makes his beginning as a workman, for they begin, if not without tools, yet with those tools only which nature has bestowed upon them. Man finds himself almost utterly destitute; indeed, he is the most wretched, the most indigent, and the most defenseless of all creatures until he has contrived and fashioned a tool, or, rather, a set of tools. His thumb-furnished hand—unique apparatus though it be—is not itself a tool, but it is a tool-holder, and it soon appears that the human hand and the human reason are complementary the one of the other.

435. The constructive orders around us not merely start, as we say, from an advanced position in setting about their day's work, but they go straight forward toward their end, losing no time, wasting no strength in blunders or in earning experience at a dear rate;

they meet no vexations in attempting what they find at last to be impracticable. But then, when the immediate end of animal labor is attained, when the task is completed "according to order," nothing more, nothing in the way of experiment, in the hope of improvement, is ever attempted. The boundary-line which encircles the mechanic and constructive ingenuity of the animal orders has no parallax; it is as fixed as fate.

436. And so—or very nearly so—does it seem to be among those degenerate races of the human family with whom the abstractive faculty has for many generations been dormant, and among whom the rugged necessities of savage life press hard, and press constantly, not only upon the many, but upon the specially endowed few. It is not to be doubted that one or two of the race of Bezaleel and Aholiab, and Tubal-Cain also, are born into every tribe that prowls through untilled wildernesses; but then these gifted few are indulged with no reprieves from the penal conditions of savage life, such as might favor the expansion of those intellectual emotions which are dead asleep in their natures.

437. It is when these emotions are quickened, it is when these elements have received their yeast of fermentation, that the man—constructive—goes on from tool-making and weapon-making in the rudest style to machine-making, first of a rude kind, but at length to machine-making of so refined a sort that the human intelligence comes to diffuse itself and to breathe its own meaning into hard materials. All the metals and all the woods, all chemical matters, along with the

most occult forces of the material system, come to be moulded into (might one so say) dumb proxies of reason itself, achieving tasks a thousand times more difficult than any which hands and limbs could attempt.

438. It is first at the instigation of hard necessity, but it is only just at the first start that man becomes constructive. Soon, if indeed he has entered upon the course of advancement, he wakes up, and obeys that purely intellectual impulse which carries him forward, never again to stop until he shall have worked up all the materials of nature, and shall have converted to his purposes all its powers, and shall quite fail to imagine any further possible adjustment of these that might engage his energies.

439. Here, and once again, the intellectual emotions may be traced to their rise in that element of Mind which is its primary distinction. The human mind follows mathematical abstractions with so much eagerness, because its theorems come before it as instruments or means for knowing more than it yet knows, and for doing more than it has yet done. And thus, too, Mind, as power, goes in quest of causation, for it is the knowledge of causes and of comprehensive laws which brings it into a commanding position toward the multiform phenomena of the material world. In like manner, though acting in a different direction, Mind, as power, becomes inventive and constructive; and it does so that it may extend its forces over the greatest possible breadth of the material system, and that it may bring the elementary agencies of nature under its control and into its service.

440. Mind, vivified by its intellectual impulses,

must seek to know all things, and it must aim to do all things, because in its nature it is a force that has no consciousness of limit or prohibition. Just as matter gains speed and momentum while it is falling toward its parent mass, so Mind gains speed and momentum every moment as it is rising toward universal truth.

441. The satisfaction or acquiescence which arises from the inspection of a complicated machine when its adjustments are understood and when its productive powers are witnessed, is vivid and of a peculiar kind, especially when it is the inventor who looks upon his realized idea. The machine, life-like as it is, stands forth the imbodiment of his own mind: he does not regard it so much as success achieved in a difficult enterprise, nor does he care to reckon upon it as a source of advantage to himself, for it is far more—it is the clear expression of thought; it is thought become palpable and visible, and made efficient for its destined purposes.

442. The very contrast between the solidity of the materials—the massive iron, the steel, the brass—tons, perhaps, of metal—and the reason which these substances now imbody, this contrast enhances much the pleasure with which the machine is contemplated. Vegetable, and, much more, animal organizations, *conceal* the life which they include; for this life so melts into and so commingles itself with the fluids, the pulps, the semisolids, that the two lose themselves the one in the other; the living body is at once soul and palpable substance—it is one being, apparently homogeneous in its constituents.

443. Not so the machine; for in this instance reason on the one side, and the hardest and most impracticable materials on the other side, stand before us in a forced combination, and there is no amalgamating element that should blend the two, hiding the one in the other. Of all the modes in which human reason symbolizes or gives expression to itself, a perfect machine, in productive movement, is at once the most abrupt and the most perfect. The despotic force of mind as related to matter speaks out in this case, and submits itself to no softenings of its meaning. The uninstructed spectator of such a work looks at the hard material as standing *foremost* in his view, while he dimly descries the principle as if it were couching within the intricacies of the structure. But the instructed spectator sees in the same mass the mind, the reason, *foremost*, and the material in the rear; he looks at it as a vanquished resistance, which, after an arduous struggle, and in the use of much strategy, has been taught its lesson of implicit and unfailing obedience. How arduous this struggle of Mind with hard matter has been, those only can well imagine who have spent years upon this field.

444. We have just now said that the human mind, in following the leadings of mathematical abstraction, and again in mastering the philosophy of the material universe, establishes the fact of its homogeneousness with the Supreme Creative Reason. But on the path of constructive invention, man, who is at once the designer and the workman, finds, if he will but see it, a different kind of evidence of the accordance of his own mind with the all-provident Mind above him. This

evidence springs from that copious and marvelously exact provision which has been made, both in the elementary or chemical principles of the material world, and in that endless variety of natural substances which are required for meeting the occasion and for surmounting the difficulties incident to the labors of mechanical invention. This is a large subject, and to adduce instances would fill volumes.

445. A machine can not be effective—it will not go unless in its parts and movements it is in harmony—perfectly so, as well with mathematical theorems as with mechanical laws. A complicated machine must be an expression of those very same principles which govern the celestial system; it may be called an epitome of the mechanism of the heavens. Such as are suns and planets, such as are those binary systems of the remotest sky, such, with a severe exactitude in principle, is this machine, or it will not work.

446. A structure of this sort involves also a conformity with some among the multifarious properties of all known substances. On this ground, therefore, again, it is an expression of that preordained harmony which connects the finite mind with the Infinite Intelligence.

447. This parallelism or co-ordination, which thus presents itself as existing between the finite and the infinite reason, includes one other element of accordance, but it is one for which we fail to find an unexceptionable form of expression. Yet, if due allowance be made for the imperfection—unavoidable—of language, then we should say that the material world, with its vegetable and animal species, is the expres-

sion not merely of perfect reason in its contrivances, nor merely of beneficence in its (apparent) purpose, but also of an attribute analogous to this impulse of the human mind of which now we are speaking, namely, the desire to imbody the conceptions of reason in actual organizations, and to see imbodied whatever may be conceived of as possible and good.

448. This same constructive impulse, of which only the most obvious products, such as tools and machines, have here been mentioned, shows its energy in many other departments of human labor. All those social, commercial, and political combinations, all those arrangements for the orderly transaction of business, private or public, all codes of law and schemes of polity, by means of which the wills and the interests of individual men are reduced to system, and are made to conduce to the greatest good of the many—all such contrivances and schemes of order, whether tangible or not so, are instances coming under the same general designation as products of the constructive faculty and the constructive impulse.

449. The mechanical inventor, laboring amid the roar and din of furnaces and forges, the Marlborough, the Napoleon, the Nelson, the Wellington, laboring amid the roar and din of battle, and the legislator in his closet or at the council-board, are all, in their several spheres, employing nearly the same intellectual powers, and these powers vivified by nearly the same intellectual impulses. The differences which distinguish them are much less in the elements than in the motives, and in those passions of a secondary kind which come to cluster around occupations so dissimilar.

450. In this section we have thus named what appear to be the leading or the most elementary of those impulses which, coming to bear upon the human intellect, give it their own direction, and impart to it not merely a never wearied activity, but a constantly accelerating force.

451. What, then, is the aggregate product? An answer in full to this question must be made to embrace every thing (short of that which belongs to the moral element of human nature) that constitutes the difference between the nations of western Europe and the aborigines of the Australian continent.

452. But now, when we come to look into the vast mass of what might be adduced in illustration of the immeasurable prerogatives of civilization, with its arts, its science, its philosophy, and when we trace these great products of Mind to their source in the constant elements of human nature, we are confronted with the perplexing fact, brought to view as it is by the comparison above stated, that these elements, these inborn energies, give evidence of their existence only in what must be regarded as exceptive instances. Take the human family—all races and in all times—and then the million to a few have lived and perished in the unknowing, the unthinking, the comfortless, and the precarious condition of a savage or of a semi-barbarous condition, certainly destitute of science and philosophy.

453. This fact, putting out of view just now whatever explications it might admit of on moral or theological grounds, demands some attention.

XIII.

CONTINGENT DEVELOPMENT OF THE INTELLECTUAL FACULTIES.

454. It must by no means be imagined that man has achieved the great things which he has actually accomplished in science and in art, as if it were by breaking over his appointed bounds, or as if by an ambitious violence done to his nature. We must not suppose that the heights of philosophy have been scaled by man in defiance of the law of his being. This can not be thought; but if not, then we are confronted with the fact that those powers of mind which are rudimental in human nature, and upon the development of which the well-being of man individually and socially so much depends, are so lodged in his constitution, or are so conditioned there, that the probability of their ever being developed and coming into act are, at the best, only equal to the contrary probability.

455. If, as we have just now said, the history of the human family, in all times and in all lands, were to be summed up, and a report were to be prepared which might be received as the statistics of intellectual development, it would thence appear that this development has been the exception more than the rule. A development of some one of these faculties alone has been less rare, but still the slumber of all has

been, if we reckon the human race in the way of a census, the condition of the many in all times.

456. On this ground, then, the contrast between human nature and the animal orders around us is marked and is extreme, and it is of a kind which it would be unphilosophical to dismiss as if it had no deep meaning, or as if it did not indicate, nay, conspicuously display a fundamental principle in the structure of the human mind.

457. Throughout all species in the animal orders Mind invariably completes its intention; it makes full use of its powers, neither more nor less; and it does so with an undeviating regard to the law of its structure in each species, and it does so from age to age, unchangeably; but it is not so with man.

458. To a certain extent, this anomalous condition of the human system may be shown to conform itself to law; or, in other words, it has its apparent reason, and it justifies itself in the result as affecting the welfare of the social system at large, as for instance:

459. When we bring into view a civilized and a cultivated community, including its several orders, the under and the upper, the more and the less educated —the laborers mechanically, the laborers intellectually—those who command their time, and those whose time is every day bartered for bread, then such facts as these are easily seen to belong to the structure of human nature, as intended to undergo, not a solitary, but a social development.

460. The first of these obvious facts is this, that the intellectual *emotions*, and the *tastes*, and the tendencies which concrete about them, are bestowed by

nature upon the social mass in far greater profusion than are those intellectual faculties or powers of reason which might yield any appreciable product. For one mind that is endowed as well with the power as with the emotional taste, a hundred minds, or a thousand, or many thousands, possess the feeling, the sensibility, the communicable soul which bring them within the influence of this, the gifted one in ten thousand.

461. The reason of this unequal distribution of the feeling and of the power it is not difficult to find. The product, the commodity that is needed for the benefit of the many, is of a communicable kind; it is what may be conveyed and transmitted, and gazed at, and used, and admired, and repeated, and copied, and indefinitely diffused. When light is needed, it is enough that one flame should be kindled, which will enkindle others, or will itself shine upon all. There would plainly be a waste if intellectual powers were as common as intellectual tastes, or aptitudes to use and enjoy the products of that power.

462. This unequal relationship of the faculty and the aptitude to use and enjoy has this further meaning, that it tends greatly to enhance the motive which bears upon the minds of the few gifted individuals. The gifted man, unless he be strangely anchoretic in his dispositions, knows and feels that in his solitude he is laboring for the many; that his excellent achievements will be accepted, and prized, and used by his contemporaries, and perhaps even by the men of distant times. Here, then, a provision is made for throwing in an intensity of productive force upon the faculty whence the needed product is to arise.

463. Another fact which presents itself as a law, determining the unequal distribution of intellectual powers and tastes, is this, that those which are the most largely bestowed are of that kind which are most in request, while the more rare gifts are those which *may* be rare without detriment to the commonwealth.

464. Among the various products of reason, that one kind which is the most infallibly communicable, without chance of detriment or deduction, either in quantity or in quality, is mathematical truth. That which has been achieved (to look only to modern times) by Leibnitz and Newton, by Pascal and Euler, by Lagrange and La Place, has long ago become the property, whole and entire, of the mathematical world; nothing has been lost or damaged in the transmission and dispersion of these treasures, any more than the solar beams are damaged when they speed themselves onward daily from Asia to Europe, from Europe to America.

465. That loftiest order of mathematical intelligence which should be spoken of as mathematical genius, and to which it is given to make discoveries, and to lead the human mind forward into an advanced position—this high faculty is, perhaps, the most rare of all intellectual distinctions. Upon this table-land of Mind the names of those who, in the course of the thirty historic ages, have set up their standard and left their monument, are not more than six or eight.

466. Meantime, enough of mathematical intelligence, and feeling, and taste—often of a high, although secondary order—has developed itself in all cultured nations. There has been no lack, at any time, of the dif-

fusive medium; there has been no scarcity of minds thoroughly accomplished for the labor of sustaining, and extending, and teaching, and applying the higher truths in this department. In this instance, then, we do not venture far in saying that we see the reason of this unequal distribution of powers and faculties; we seem here to discern a law, and to trace it in its operation as beneficial to all.

467. On the field of physical philosophy the leading minds—the discoverers—have been more numerous. It is not that the products of thought in this region are not communicable when once they have been fully realized; but here there are various departments, and therefore a division of labor must take place, both on account of the extent of the tasks to be achieved, and because these tasks are such as demand peculiar tastes and faculties in those who undertake them.

468. Physical philosophy is pursued on the separate fields of celestial mechanism, chemistry, geology, physiology, both vegetable and animal. It will not be found that any one mind stands first in each of these pursuits. A mind that grasps the whole is likely to be less eminent in discovery than in classification. The man of all sciences is logical rather than explorative. Such was Lord Bacon's function, and such was the position he occupied toward the encyclopedia of modern philosophy—he indicated a method.

469. Mechanical invention and the multifarious products of the constructive faculty are indeed readily communicable, and they soon become the common property of nations; therefore a highly-gifted few might labor for the benefit of all. But again, on this ground

as in physical science, the tasks [illegible] very many and dissimilar, and the species of abi[illegible] it is applicable to them must be as various. The [illegible]cement of nations in civilization and in its a[illegible] [illegible]ires a copious supply of inventive and constru[illegible] genius; and, in fact, minds endowed in this manne[illegible] born in abundance, and they find, individually [illegible] particular [illegible] waiting for them.

470. As to those products of mind the conveyance of which is wholly dependent upon language—such as poetry, and prose too of the imaginative or rhetorical order—they, of all its products, are the most restricted in their means of transmission. Poetry can never be made the property of all nations, for it is not translatable. The world has never yet seen a translated poem or a translated oration, for the best of these attempts has been such that the poet or orator would have died of vexation if he could have seen his mind reflected in such a mirror. Every people must receive from its own sons, by the liberality of nature, its own Homer, and Sophocles, and Demosthenes; its own Virgil and Horace; its own Dante; its own Shakspeare and Milton; its own Goethe; and so, in fact, it has always been. Again, then, we catch a glimpse of law, and see it in beneficial operation.

471. But much less clearness attends our course when we go in search of some general principle beyond this point. How is it that the human mind accomplishes its destiny on the field of reason only in so exceptional and in so precarious a manner?

472. It is not always true, even when a community has passed beyond the semi-barbarous condition, and

when there has come to exist within it a class raised above the urgent necessities of animal life, that the intellectual faculties expand and develop themselves spontaneously. Many nations have passed onward through centuries—they have risen, and flourished, and disappeared—enjoying, to a certain extent, the fruits of civilization, and yet never putting forth, as from themselves, the higher products of philosophy, or of poetry, or of the fine arts.

473. Some very peculiar conditions, attaching to the physical temperament of the race—certain occult excellences in the national stock—seem to be indispensable to the development of the higher faculties. And yet, when once we have actually obtained the products of these faculties in philosophy and in art, they are such as may be conveyed to and made available for the benefit of races that never have, and probably never could have, created them for themselves. Man, as one species all the world over, proves himself to possess powers of mind which, in fact, do not expand except under conditions the most rare.

474. Certain it is that the intellectual faculties in human nature are not developed in obedience to any such laws as those which determine the exercise of the constructive or other faculties in the animal orders. Law, or, in other words, those fixed conditions under which animal life fulfills its destiny, can not be imagined to take effect otherwise than with *universality* as to each species of animal. But with the human species there is neither this universality in the operation of any such laws, nor is there any uniformity in the products when these actually appear.

475. When we speak of the constant and uniform development of reason in the animal orders as exhibited in their constructive labors especially, we must intend this—that the intellectual volition follows in a track that is marked out for it by nature: the animal structure is such that, in given circumstances, the volitions will be invariably such and such. The universality and the uniformity of these products indicate, or we might say demonstrate, the presence and the unfailing constancy of the laws which rule the animal mind.

476. Shall we then be warranted in affirming the converse conclusion, which is this, that, where there is neither universality nor uniformity in the development of reason, there is present no law or no determinative influence to which reason is subjected? Are we safe in assuming, on the ground of these anomalous facts, that reason in the individual man follows no direction from any source that is anterior to itself? In other terms, our hypothetic conclusion would be this: that the human mind gives law to itself; that it is its only law; and that, as to the exercise of its highest faculties, it is absolutely initiative.

477. Abstaining from a positive assumption of this hypothesis as if it were a demonstrated truth, we take rather the safer course of following reason some way into its recesses, and of noting the mode of its procedure in certain definite instances. Among these instances, the one which is the most easily followed is that which has place when an interaction is going on between the intellectual faculties and the instrument or engine of all mental operations, namely, LANGUAGE.

XIV.

LANGUAGE AS RELATED TO MENTAL OPERATIONS.

478. THE primary purpose of language as the means of communication—mind with mind—subserves a purpose scarcely less important in the development of the intellect when it is employed as the instrument of thought by the individual reason. Single words, and certain constant and conventional combinations of them, are the tools of thought, and without the aid of these its processes must stop short at a rudimental stage.

479. In relation to different intellectual processes language is a more or a less indispensable instrument. It yields also an aid more or less necessary to different minds, according to their original structure, to their abstractive power, and to the extent of culture they may have received. But there are certain operations (as we shall see), in carrying forward which it can scarcely be imagined that even the strongest minds, advantaged by the most perfect discipline, could dispense with this assistance, or could think to any good purpose otherwise than as leaning, from step to step, upon words—phrases—propositions.

480. Language, to become fully available for these purposes, must be held at command under conditions which should be understood. The mind, while employing this, its instrument, must have set itself free, in

some degree, from the thraldom of words and phrases. This emancipation takes place, to some extent, in the course of the most ordinary education, but in the fullest manner only when culture has been carried forward into adult years, or otherwise in rare instances of native powers of mind of a high order.

481. Soon after its awakening in the midst of a world of objects, pressing upon it through the senses, the human infant, while listening to the voices that soothe or that startle the ear, is yielding itself to a process, in the course of which the world of words comes to adhere, point after point, to the world of objects; and these adhesions, multiplying every day, and becoming more and more firm or indissoluble, are at length so thoroughly riveted or welded that the union could scarcely be more intimate if, in fact, the mother tongue were born with the mind itself. If the human family had known only one language, it would scarcely have been possible for us to entertain the supposition that words are nothing more than arbitrary signs, and that they might therefore have been other than they are.

482. In fact, millions of men pass through their destined course of years with no other consciousness than this. Thought and language have never been sundered, in all their experience, from infancy to age. So much intellectual action as may consist with this fixity is possible to minds thus conditioned, but not more. It is the function of education to break up, in a greater or less degree, this rude congestion, and to give to the mind its proper supremacy in relation to its implements.

483. The teacher makes a commencement in this process when he finds occasion to revise the child's glossary, substituting one term for another wherever a faulty fitting has taken place as to the meaning of words. The child, by an unconscious inductive process, carries forward this corrective operation for himself while he listens to the promiscuous conversation of adults. His alert curiosity not only brings him into possession of a stock of convertible terms—synonyms, equivalents, and metonymic phrases—but it leads him to loosen himself off a little from that intimate blending of words and ideas which had taken place at the first.

484. The acquisition and the actual use of one or more languages beside the vernacular greatly accelerates the process of liberation, as does also an initiation in those abstract sciences which demand a laying aside, for a time, the colloquial sense of language, and the taking up an artificial, or technical sense. By means such as these, that fixity of the connection between words and ideas is loosened, which is the impracticable condition of minds among the uneducated classes.

485. And yet culture may go very far, and still it may leave the mind under thraldom, if not to words taken singly, yet to a mass of conventional and customary combinations of them. It is so especially with those minds that may be designated as the logical or formulative. Persons of this class think only by sentences or by clusters of words. It is less, or scarcely at all so, with those that are at once analytic and synthetic, inventive and creative. If words are the tools of thought, the same may be said of them as of those

implements which are wielded by the hand. The unvaried use, year after year, of certain implements of the mechanic arts so becomes a second nature to the artisan that there is room for the question, Which of the two is really the master, the workman or his tool? the hand and arm obey the tool as much as this obeys the muscular force.

486. A very large proportion of all ordinary discourse, public and private, follows in the track of conventional forms, which are scarcely less determinative as to the movements of thought than are the rails to the course of the train which speeds itself upon them with more of the appearance of spontaneous force than of its reality, and yet this despotism of conventional speech is not to be complained of, for by the means of it the social system holds its onward course with a steady momentum, and it avoids the peril of a road which otherwise it might choose for itself. Certain utterances, as well of feeling as of opinion, are (to change the figure) stereotyped, and by means of these accredited forms a tacit censorship is brought to bear upon society, much to its advantage. The individual man, when he accepts the aid of certain modes of parlance, yields himself unconsciously to a process of revision which retrenches much and amends much that might offend all ears if uttered in its native form.

487. Thus far Mind and its implement, language, exercise a divided empire, or they rule the man in alternating moments. But the development of the human faculties upon higher ground can take place only when the rightful supremacy of the one and the due subserviency of the other of these two powers has

been firmly established, and has become the habit of the reason.

488. In listening—so far as it may indeed be possible to *listen* in such cases—to the extemporaneous discourse of public speakers, to whom exercises of this sort have become only too easy, one may follow the "law of thought" from the end of one sentence to the beginning of the next, and from the closing sentence of one paragraph to the initial sentence of another, and one may clearly discern what that principle of sequency is which gives law to the speaker's mind as he glides along upon the worn tram-road of accustomed utterances. Exercises of this sort might well enough be adduced in illustration of the doctrine that a "law of suggestion" of some kind rules supreme in the world of Mind.

489. But let it be supposed that a speaker's course of thought is suddenly influenced by some cross current, or by some incidental motive which comes to combine itself with, and to give a varied character to the discourse. In this case there is before us a much more complicated phenomenon. The mind, subject, as it is assumed to be, to its customary "law of association," is here seen to be serving two masters; it is pulled forward, now by the right-hand force, now by the left-hand, and yet it contrives to hold on its way between the two.

490. That it should be able to do so is perhaps conceivable, for such is the velocity of our mental operations that we may suppose even an ordinary mind to be capable of this rapid alternation between two distinct courses of thought, and yet that it should be

able also to preserve some coherence, and to give consistency to both in its flow of language.

491. There are, however, products of the human intellect of a far more complicated order than those we have now been supposing, and to which it is exceedingly difficult—granting it to be possible—to apply a suggestive theory of any kind. In yielding itself to a law of suggestion, or to two or three such laws, running on parallel to each other, it either obeys these influences *according to their relative forces*, or itself rules them: the ultimate product is either, mathematically, such as the two suggestions make it, or it is such as these make it, controlled, not by another suggestion, but by the Mind—uncontrolled, and in act a law to itself.

492. Whatever may be the instances which we should adduce in support of an hypothesis that might seem to be applicable to the problem before us, they ought to be relied upon always with a degree of reserve as being in some sense ambiguous; for, whenever a question arises concerning the existence or the non-existence of *an elementary principle* or a primary fact in nature, we surrender the very ground on which we wish to establish our theory if we go about to make it good by a course of logical reasoning. This rule has already been insisted upon. Instances brought forward in illustration of any such hypothesis should be appealed to only for the purpose of showing that, if we grant this hypothesis, then such and such facts become *more intelligible* than they can be in rejecting it.

493. Let it be that we are held to a dilemma of

this sort—we must accept an inconceivable supposition of one kind, or we must yield assent to an inconceivable supposition of another kind; the difference between the two being this, that the one accords with our consciousness, while the other contradicts it.

494. Among the highest products of the human mind, those must take a foremost place in which several elements, each governed by its own law, each having its own conditions, are so combined as to yield a uniform, symmetrical, and congruous result—a result in which no violence has been done to any propriety, and in which nothing is redundant, nothing is wanting. A product which actually satisfies these conditions, difficult as they are, may safely be adduced as an exemplification of the structure and functions of Mind, or as a proof of what it is capable of when putting forth its powers at the best.

495. Products of the human mind may be regarded as admirable either absolutely in themselves, or considered in relation to the peculiar circumstances under which they may have appeared. A labored oration is what it is after the toils of weeks and the hours of many nights have given it the faultless perfection which at length it exhibits; or an oration—and perhaps it is not inferior to this first—may have burst from the speaker at the moment, and under the inspiration of some extraordinary occasion. In this latter case it would surely seem to deserve a higher praise than in the former.

496. In such an imagined instance of extemporaneous eloquence, the orator—at the bar or in the senate—brings up to the occasion *first* his main purpose or

his political or legal doctrine; *then* he brings his own habituated flow of language—his style and manner; *then* he brings his copious treasure of images, analogies, tropes, and figures—a never exhausted stock. With all these various materials in hand, we may suppose that he is able to make them available from instant to instant, as he goes on; and they are thus available—let us grant it—because certain laws of suggestion, which are already familiar to him, and are prompt to present themselves, bring forward the very article which best fits the occasion, each kind taking its turn, and each giving place to another, when it ought, with electric rapidity.

497. But now, while this evolution of commingled thought is in full flow, an incident—unlooked for—such as the suddenly manifested feeling of those whom he is addressing, and whose concurrence he is laboring to secure, induces the speaker, in a moment, to shift his ground of argument, to modify his doctrine, and to divert from his first purpose and to aim at any other.

498. At this critical moment, then, there comes to bear upon the mind a new law of suggestion—a train of ideas not at first included in the fabric of thought, and this must now be combined with it; yet it must so be done as to avoid abruptness or the appearance of incoherence. The then-present trains of thought must be severally seized anew, and must be trimmed and adjusted, and the fabric must offer to the admiring eyes of those around a new pattern, a new color, and, nevertheless, it must be a perfect work.

499. The achievement of a task so arduous as this

(and to achieve it with brilliant success) seems to demand these two conditions, and the one of them as indispensably needed as the other. The *first* is this: that copious and various materials should so range themselves within prospect of the mind as to be available at the instant when they are needed; the *second* condition is this: that a disposing power superior to these materials, and restricted by no conditions, and shackled by no laws of sequency, shall hold the central place, while it freely gives law to all.

500. Yet may not this hypothetic supremacy be itself resolvable into another law of a higher order, which comes in to take effect over the head of all others? This may be imagined as possible, though it be at variance with our consciousness of intellectual action.

501. We turn to another instance, and it shall be one that is familiar to every English reader. Let it be the "Elegy written in a Country Church-yard." In this highly-finished production three separate elements are combined in one harmonious result, and they are so combined and so perfectly blended as that each, in turn, might be regarded as the chief, or the sole purpose that had been in the poet's view, and to which he had subordinated the other two. Each is precisely what it should be irrespectively of the others; each is as if it were principal, and each is as if it were subsidiary.

502. In this Elegy there is, *first*, a deep moral intention; there is the doctrine of human life in its sombre aspect, and such as it shows itself to be, not in king's palaces, but in a rural church-yard. The *sec-*

ond of these elements, every where present, and subsidiary to the principal intention, and yet independent of it, is a delicious series of images—pictures—drawn from the purest and most agreeable sources, and each presented in the purple light—the subdued splendor of the poet's own brilliant and chastened fancy. The *third* of these elements, again subservient to the first and to the second, and yet governed in the most absolute manner by its own laws, is the faultless rhythm of the composition—its soft cadences—the music of its highly artificial collocation of syllables. The verse is as if it were allowed to be master of the sense and soul of the poetry; the imagery is as if the poet's only aim had been to yield a luxurious hour to the intellectual voluptuary; the moral is such as the preacher would willingly make his own, and render into his dry didactic style.

503. Nevertheless, this Elegy is not an alternation of verse, and of imagery, and of doctrine, for it is, throughout, one product; every where, and in each line apart, it is true to the requirements of each of its constituent principles.

504. The characteristic of a production of this order is this, that it contains no instances of an ill-managed compromise either of the sense to the sound, or of the sound to the sense; there is no putting in of images which subserve no purpose but that of decoration. On the contrary, an artist of inferior ability quickly betrays his want of skill and the low rate of his disposing power: his materials kick against his main intention; the moral gives way to the obduracy of the versification; and often the humiliating fact ob-

trudes itself, that a mere rhyme has been allowed to override the versifier's serious purpose, or to drive him from his ground.

505. The function of Language, when a composition such as the above is referred to is evolving itself from the poet's mind, is to hold all the materials in solution. Language, with the entireness of its treasures, constitutes the medium—we may say, the fluid mass within which all materials are brought forward to be judged of, and within which the inchoation of thought may freely take place and may be gradually advanced until the last requirements of a fastidious taste have been satisfied. The poet's intellectual culture has at once brought all the funds of his native language before him, and it has also set him free from the fixity of words in their connection with ideas or feelings. He has its wealth at his command, and he has a perfect mastery over it.

506. A copious and highly elaborated language may thus be regarded as the means or the field of that sovereignty which we are assuming to be the distinction of the human mind, and apart from which no products beyond the merest rudiments do in fact ever appear. Laws of association or suggestion avail in any process which runs upon a single line, but they can avail little or nothing when several of these lines of suggestion, independent one of the other, are to be wrought into a tissue that shall be uniform, homogeneous, and coherent.

507. On a dead level as to its social and political condition, a people may make good progress in the arts of life and in the exterior things of civilization;

that is, it may advance so far as it may go under the guidance of rudimental laws of intellectual action—laws of suggestion. But with a people that is thus in thraldom under the passive principles of the mental constitution, the sciences are only empirical arts; philosophy is a fantastic chimera; art is monstrous; religion is a myth, and a means of despotism to a few; the polity of the people is such an organization of the mass as forbids individual development. Such a community may be believed to have attained its highest condition in a remote time, history does not tell us how or when; and as to its after-periods, history has allotted no pages to its memorials.

508. Whether it is a race that has created its language, or the language the race, is a problem toward the solution of which little progress has hitherto been made; nor does it belong to our subject. But this is certain, that, apart from a language which is at once copious and plastic, and abundant in abstractions, the thinking of a people is thinking in mass; it is not individual thought. Individual men, the people's heroes, may have been great in action, but there has been no intellectual greatness sporadic among the people. There has been no literature rich in biographies, and nothing among its records which it is not a weariness to peruse, and a worse labor to attempt to remember.

509. Intellectual development, with its true philosophy, its demonstrated science, its fine arts, and its refined civilization, is, in a word, the expansion of unconditioned thought, and therefore it is exceptional; for, if it were conditioned, it would be universal and uniform in its products.

510. Exceptional as to races and as to times, such it appears when the human family is looked at in a comprehensive manner; and then if, from an elevated position, where our prospect is wide, we move down and look around us in any private circle, the same exceptional condition presents itself as characteristic of the intellectual development of those around us. A mental condition including nothing more than what is proper to human nature in the abstract is, in fact, the rare distinction of one mind in a thousand.

511. We are not supposing an instance of extraordinary productive faculties, or a mental force of great intensity and great radius, but are thinking only of that sort of disposing power in the mind which we at once recognize and bow to at the moment when an individual so endowed steps upon the stage of society.

512. What we have here in view is not (need we say so) the arrogant willfulness—not the stentorian egotism of the man who is "wiser in his own conceit than seven that can render a reason," nor is it the honest bull-headed determination of one who so maintains his opinion that the modest and timid give ground before him in argument: the mind of power we have now in view might claim its descent, not from Samuel Johnson, but from Francis Bacon.

513. Let the philosopher who assures us that Mind is invariably governed by the law of its idiosyncrasy, and of habit, and of education, and of professional occupation—by laws of taste and of moral tendency—let him take his seat at a table around which the choicest men of a neighborhood or of a metropolis are assembled, and where all the liberty of speech is en-

joyed which is conceivable or which can be desirable: this sage, as he sits a silent listener to the rattle of discourse, will be glad to confirm himself in his doctrine as he notes his pertinent instances, and feels that he should seldom err, after a time, in predicting the deliverances of each mind on any given subject. The law of each mind is indeed, as he says, "each mind's law:" it is a law never, in fact, *violated*, although it may often be deflected by its collision with other minds.

514. But let us imagine that chance has brought into this party, not a "celebrity" in science, not a man who has long ago won for himself a "European reputation," but a mind which is sovereign in relation to its own materials—to its own methods and processes of intellection, and supreme in relation to "fixed sequences" of every kind. A rare mind indeed, and yet it is in no sense monstrous; it is not supernatural; it is rare, as related to the masses of a cultured community, in about the same proportion as that in which the cultured races of the human family are few compared with the innumerable millions of the semi-barbarous and the savage.

515. In what, then, consists this supremacy or this disposing power, which exhibits itself in combining various materials with relation to a foreseen product? In search of an answer we may follow it out a little farther.

516. The company above supposed includes, let us imagine, men of different nations: there is the German, the Italian, the Frenchman, and there is a southern and a northern sample of the Anglo-Saxon type, recent from the United States. Each of the guests who takes a part in promiscuous discourse upon the

subjects of the day—the interests and reputation of nations, shows a well-bred regard to the national feelings and prejudices, and to the presumed opinions and professions of his neighbors, right and left, and yet in doing so he betrays his wish to do it: he fails in the skill of combination, and he fails in a way that is analogous to the mishaps of the blundering poet who, when he can not bring rhyme and metre to obey his principal meaning, leaves his principal meaning to shift for itself, or to be quite set aside by the obdurate requirements of versification. These several speakers insert, at places in their utterances, whatever of concession, or of oblique apology, or of varnish they may wish to blend with the genuine expression of their individual opinions.

517. It is not so with the one speaker to whom all eyes and ears are sure to be directed by the time he has uttered twenty words. The *materials* which he deals with, and which he converts to his purpose with an artless ease and a ready fluency, are such as these. There is, first, whatever of fact or of principle is directly pertinent to the subject in hand—political, statistical, moral, ecclesiastical, as the case may be; secondly, there is the known or surmised opinions, interests, prejudices, professions of those present; and, thirdly, there is his own individual tendencies—his idiosyncrasies, of which he is at least as well aware as he is of those of other men, but over which he exercises a constant repressive control. Now these materials, various as they are, do not come up in the speaker's discourse as diverse patches here and there inserted, for the entire fabric of his utterances is homogeneous:

it is a work wherein all shades of thought—even every fibre of latent meaning—comes in where it should come in, and contributes its aid to the general effect.

518. The plasticity of language and its copiousness are the indispensable condition of so nice an operation as this. The speaker knows how to avail himself not merely of its stores and of its emphatic forces, but of its ambiguities, its conventional evasions, its graceful obliquities, its dim metonymic ironies. The solid matter of thought thrown in upon the liquid mass of language undergoes there a process of adjustment which, though it is completed in less than an instant of time, falls little short of being a perfect work when it reaches the ear in its measured yet artless cadences.

519. An extemporaneous work of thought, such as that which we have now imagined, and which — although it is not of every-day occurrence—is no miracle, we regard as the last product of A CAUSE over and beyond, or above which, or anterior to it, there is no causality whatever. This utterance is the exponent of a Power which, in the most strict sense, is initiative: there is nothing that is either of earlier date or of higher position than that Power of which the product (in the case before us) now meets the ear. In listening to such an utterance, a very peculiar feeling ensues; for, instead of being invited to accept the best we can get of the worn matter of customary discourse, we now, with a sort of galvanic consciousness, feel that we are in close contact with the Power of Mind. Sheer thought comes home upon every mind, or upon every mind that is not itself too much worn, and wasted, and spent to admit of such a consciousness.

520. A motive of reverence toward some metaphysic axiom may incline us to reject as delusive this vivid spontaneous consciousness of touching upon a First Cause on occasions of this sort, nor will there be wanting the semblance of reason to support us while we are endeavoring to choke our instinctive convictions with accredited academic formulæ.

XV.

RELATIVE VALUE OF CERTAIN TERMS.

521. At this stage of our course, and before entering upon subjects of an entirely different kind, it will be well to assign to their places certain terms and phrases which are customarily employed in speaking of the intellectual faculties. The words and the modes of speaking now referred to may retain their places in colloquial parlance, for convenience' sake, if only we remember that no scientific value attaches to them, and that they are employed much in the same way as we allow ourselves to speak of astronomical phenomena—not as they are, but as they seem to be.

522. The set of words, and the usual expressions which we have now to dispose of, carry with them this apparent meaning: that the mind—or, to speak restrictively, the human mind—is a concrete of various powers and separate faculties, which are lodged side by side, or in an upper and under relative position, within the thinking substance to which they cohere. It is thus that the "Will" is spoken of as if it were a faculty distinct; and so the "Memory," and the

"power of Attention," and the "faculty of Abstraction" or of Analysis; and so the "Association of ideas" is the mode or law of a faculty, and so the "Imagination."

523. This loose and popular mode of speaking has prevailed so much, and it has continued in use so long, partly because intellectual philosophy is an open field, trodden by a promiscuous crowd of intelligent persons, who, though they have never trained themselves to analytic thought, yet believe themselves competent to discourse concerning "mental science."

524. But the tendency to divide the mind into "faculties" or separate organs has taken its rise from certain anatomical and physiological habitudes or preoccupations on the part of some who have led the way in this department.

525. Sensation (in the five senses) is departmental undoubtedly, so far as it comes under the cognizance of the anatomist and the physiologist. This fact may seem to give support to the hypothesis of a departmental structure in the mind itself; and then, when, after using the scalpel and saw, we come to lift the osseous hemisphere from off the wondrous and uninterpretable mass which it protects, there meets the curious eye a complicated and multiform organ, the several parts of which may easily be regarded as if they were articulate with the facts of intellectual science. It is easy so to think when a human brain is laid open in horizontal and in transverse section, and when all its mysteries are laid bare; it is easier thus to think than it is to repel so specious a supposition.

526. But analytic severity demands of us that, put-

ting away the palpable elements which the scalpel and the microscope bring to light, we should go into MIND —and nowhere else, when we are in search of MIND —sure of this truth, that that which is of the earth is earthy only.

527. A foremost article in popular mental philosophy is "THE WILL," which takes its place alongside of other "faculties" and "powers" as one of them. But whatever those terms or phrases may be by means of which we note the difference that distinguishes the animal mind from vegetative life, the very same terms and phrases are those which offer themselves as the very best we can use for conveying our idea of this faculty, namely, "the Will;" yet only with this difference, that the animal mind is conscious also of the properties of matter, which consciousness, as we suppose, does not belong to vegetative life.

528. Mind is not always in act either toward the outer world, or, introvertedly, toward its own states. Consciousness, perhaps, is never intermitted (unless in cases of disease affecting the brain); simple consciousness is, however, passive throughout a large proportion of every twenty-four hours, even with the most active and vigorous minds. But whenever, and in whatsoever way, Mind is Mind *in its own sense*, then, and just so far as it is so, there are no terms in which we can speak of it which differ by a particle from those of which we must make use in setting forth what we mean by this faculty of the WILL. The "WILL" is neither more nor less than MIND itself; or, if we prefer a circumlocution, we may call it the first rudiment of Mind, the second rudiment being its passive consciousness toward the properties of matter.

529. The power or faculty of ATTENTION takes a separate place also in our colloquial mental philosophy. In this instance a very easy process of simplification suffices for dispersing this hypothetic faculty. In by far the larger number of those instances to which we should apply the word *attention*, the mind determines itself toward one object among several or among many which at any time may come within its prospect, and it does so at the instigation of a motive or an impulse—such, for instance, as those of which we have already spoken, or of others of which we are presently to speak. In these cases no separate faculty or organ need be imagined; what we have before us is Mind in act at the impulse of some of its emotions or its tastes.

530. But beside these instances of determinative action—action induced or impelled by an emotion—attention fixes itself often upon a single object, external or internal, apart from, or in the absence of any motive attaching to that one object rather than to others of the same order, and which are ranging themselves on the same visible surface. If it shall be affirmed that on every such occasion the actual object of attention does in fact possess some preferential quality, although it may be quite inappreciable, our answer would be this—that the hypothesis of any such preference is purely gratuitous, for our consciousness gives no support to it. On the contrary, when we pursue —as far as, by the severest efforts of analysis, we can pursue—the evolutions of thought, we come to this issue, that the sovereignty of Mind in relation to its own states demands or consists in this unconditional

power to fix itself upon any one among many objects that lie within its range, and to pass unmotived from one such object to any other.

531. When regarded from another point of view, this same determinative force, which is the prerogative of the human mind, brings before us what we mean when we speak of the "faculty of abstraction." This is not a separate power, but a function only of Mind as related to some special occasion. This special occasion is that which presents itself when objects, or qualities, or adjuncts attaching to a concrete are required to be set off, one from the others, by noting their differences. Frequently in these pages, as matter of convenience, the colloquial phrase the "faculty of abstraction" has been admitted, for it would be a useless pedantry to abstain from the use of it; and we may do so freely, if only we remember that it carries a popular, not a strict or scientific sense.

532. Analysis is a product of the abstractive faculty. When differences have been noted, we set off the several results, whether they be two, three, or more, and thus the concrete has resolved itself into its constituents or its elements.

533. But is not the "Imagination" a faculty by itself? To what has been already said in the section on the Rudiments of Mind and in the following section, little need here be added in explanation of what we mean in affirming that the imagination is no separate faculty, but that it is an exercise only of its rudimental power at the impulse or under the guidance of a particular class of emotions, or of tastes and sensibilities?

534. These intellectual stimulants are of various kinds, and they possess different degrees of intensity. They are yet to be spoken of, each in its place; but supposing them, or some of them, to be present, then the mind, when thus vivified by some sensibility of its own, acts upon the copious stores of its consciousness—that is to say, upon those treasured ideas and images derived from the external world, which, in the first instance, were admitted with an emotion of pleasure or of wonder.

535. When keen sensibilities of this kind are conjoined with much productive force or free power in the individual mind, the product of the combination is the poetic character, which may give expression to itself either in poetry or in the fine arts. Eminent instances of this sort of feeling and of power suggest the supposition of a distinct faculty—the imagination—which we come to regard as the endowment of a few gifted minds. Some one whom we may be thinking of has "no imagination." Perhaps not; and yet he may possess, in an extraordinary degree, the very same concretive power; but then this energy combines itself, in him, not with tastes and sensibilities, but with the less impassioned emotions of abstract thought.

536. The popular belief is strong that MEMORY is indeed a faculty by itself; and when it is possessed in an extraordinary degree, it seems to declare itself to be such. This belief is confirmed by those many facts which show the intimacy of that relationship of the mind with the brain which determines both the tenacity and the readiness of the memory.

537. We are accustomed to refer a certain class of

mental operations to the "memory," while as to another class we suppose that they belong to the imagination or to the reasoning faculty; but in these instances a little attention will suffice for showing that both classes alike are resolvable into the same elements. What we need on this ground is not to call for a faculty or separate organ, but to exercise somewhat more discrimination than usually attaches to our colloquial style.

538. If we are to admit that, in whatever relates to the memory, it is difficult to ascertain or to adhere to the distinction between physiological facts and facts proper to the science of Mind, we should affirm rather less than what may safely be alleged, which is this—that on this ground the two classes of facts so melt the one into the other, or so interlock, that to hold them apart is impossible. It is here that the inscrutable mystery of the corporeity of Mind seems to spread itself out and to come near to the surface, and yet, in the most absolute manner, does it resist any further endeavors to unveil it.

539. Whatever has once entered into the consciousness—at least, if it has allied itself with the mind in act—so retains its place there as that, in a reflected manner, it may return to the consciousness with nearly all its original vivacity and distinctness.

540. Facts are not wanting—but we must not at this time stop to adduce them—which sustain the belief that nothing which has ever belonged to consciousness is afterward absolutely lost from it. This may be as difficult of belief as it is impossible to conceive of it, or to follow it out in its conditions, and yet it

may be true; and not more inconceivable is it than are very many of the surest conclusions or the most indisputable facts of physical science.

541. To what extent the countless accumulations of a fully-stocked mind may be recoverable at will, must depend upon the structure and the condition of the individual mind and brain as well as upon its habits. But here we must distinguish between the recovery *at will* of a former consciousness, and its spontaneous return, uncalled for and uncaused, as to the mind itself.

542. That mere sensations adhere to the mind so as to be recoverable does not certainly appear, but it is certain that whatever has been taken up, and has been assimilated by the mind, has in such a way become a permanent constituent of the intellectual existence that it may rise to the surface, and be anew recognized as part of ourselves at any distance of time afterward.

543. The entire material of dreams, fragmentary and strangely compacted as they may be, is supplied from this source; and so is that day-dreaming which constitutes, to a large extent, the passive consciousness of less active minds throughout the earliest years of life, and not less so of its latest years.

544. The recovery *at will*, or, as we should say, by the mind itself, of particular portions or of single atoms of these vast accumulations appears to depend (perhaps absolutely) upon laws of association or suggestion; that is to say, we regain possession of that of which, in truth, we are already in possession by its relationship to some element of the now-consciousness. A careful

analysis of that which takes place in any instance in which we apply ourselves to the recovery of what we believe to be somewhere within our reach will show that it is by help of something actually in view that we regain what is out of view.

545. The term "memory" is most often applied to two classes only of the vast fund of matters which have formed adhesions to the consciousness. The first of these is constituted of those recollections which stand in chronological order, and which make up the series of every one's personal history. The second of these classes embraces all those sets of ideas which, though they have actually come into the mind in the order of time, have so often been recalled, apart from any noted contemporaneous facts, that their linking one to another has proceeded upon some other ground than that of succession in time.

546. For instance, if we have only once passed through a country, the features of which are strongly marked, as a mountain region, we recollect its precipices, its ravines, its waterfalls, its villages, in the chronological order of the days and hours of a week's or month's excursion; but the villas, and hamlets, and green lanes of a district through which we have passed many thousand times, riding, driving, walking, by day, by night, fair weather and foul, alone and in company —these objects have quite broken themselves off from their chronological places in the memory, and they are held in view on another principle, as that of juxtaposition in space.

547. If we except a few instances of extraordinary mental structure, then—and as to the common mind

—the most steadfast, the surest, and the most readily recoverable class of ideas belonging to the personal consciousness are those which have come to adhere to it in the order of time; that is to say, those which have accrued from day to day throughout the years of the individual life. Among these chronological materials, those which are nearly identical in circumstance, such as the daily events of a monotonous existence—a life, for instance, of daily labor in the same place—these cease to be distinguishable, and they can be recovered only in mass. As to the marked events or incidents of a life of adventure or of concernment with public persons, these preserve, to the end, their chronological order, and they are recoverable, generally, by aid of their sequence as a series in time.

548. The fixedness of these materials and the readiness with which they are recovered results from the combination of such conditions as these. The incidents of the individual history are single, for no one of them has actually occurred a second time; they are conserved in a series which has been liable to no disturbance. Many of them, the leading events of life—and some, too, which were of small importance—were attended with vivid emotions, and have often returned, bringing with them some portion of the same feelings; and, lastly, this series of incidents and events, with its various points of intensity, has been a worn way to the mind itself—a path that has been retrodden thousands of times.

549. Not much inferior to these in fixedness or in recoverable readiness is that vast mass of materials which make up the subject-matter of a man's business

or profession, or of his chosen pursuits. A principal in a house of wholesale trade retains in distinct and immediate recollection the many species of goods in which he deals, and the thousand varieties in each species, and the variations of fashion affecting each, and the ups and downs of prices. Materials of this kind never fail to fall under some system of convenient classification — factitious, perhaps, or rational — but such as serves to bring the whole into contact with the mind at every moment by the aid of a settled order, long-established, and seldom subjected to change.

550. The almost incalculable materials that are embraced in a familiar knowledge of four or five languages —the two classical, with three or four of the modern languages—are so held in possession as to be available in several distinguishable modes, the specifying of which belongs in part to a systematic education, in part to a comprehensive logic, and in part to philology and rhetoric.

551. The usage of the phrase the faculty of Memory has been determined more by accident than by any regard to the nature of things. We speak of an excellent memory, or of a wonderful or prodigious memory, or of a defective memory; but these excellences or these defects attach to the mind not merely in relation to its retentiveness of its stores or to the facility of recovering portions of them, but rather to its general vigor and tone, or to the vividness of its emotions or tastes, or to the organic condition of the brain. The memory brings out to view the general condition of the mind—its force or its weakness.

552. In like manner as it belongs to scientific edu-

cation, or to logic, or to rhetoric, or to philology, to reduce to a systematic form whatever relates to the exercise or culture of the memory, so, whatever concerns the Reasoning Faculty, and its culture, and its application, should be included in a course of logical discipline. These subjects, on account of their extensive relation, as well to the business of life as to scientific and intellectual occupations, could not, to any good purpose, be treated of within the compass of a section in an elementary book that is to embrace various subjects.

553. Reason in man is Mind in act toward the sameness and the difference which constitute any series of complex abstract notions. Reasoning is the following of sameness and difference from one pair of complex abstractions to the next, on this condition—that the pairs shall constitute a continuous series, without fault or break, from the first pair to the last.

554. From an incidental source—the necessities of method—a misapprehension of this sort arises, that those mental operations which, for the sake of method, we are compelled to treat separately, each in a section or chapter to itself, are ordinarily carried forward independently of other operations, and of other functions of the intellectual life; whereas, in fact, it is only in rare instances, or on the less usual occasions, that the mind passes through any process whatever, or carries forward any operation, even of the most purely abstract kind, in any such simple condition, or otherwise than in the plenitude of its powers and habits of feeling.

555. It may be granted that, midway in a mathematical calculation, or while in the very heart of a sci-

entific inquiry, the intellectual power is moving forward on a line with the direct course of which nothing interferes, arising from tastes or emotions, or from a forethought of the result. Such instances duly allowed for, then it is true that, as to the great body of our mental acts, the whole mind—the reason and soul—the accumulations, sensuous and intellectual, of the conceptive faculty—the feelings, individual and social, and the moral sentiments also—all these elements work together, and are intricately blended in the product of thought, be it what it may.

556. But it is not until after the various elements of our intellectual existence have been separately mentioned and severally treated of that we can be in a position to review our subject as a whole, and to know, with distinctness and certainty, what it is we mean when we affirm of the human mind that it is ONE—one power, with its emotions and its boundless capacity of retaining and recalling whatever at any time it has attached to itself by its own act.

XVI.

THE EMOTIONS: DISTRIBUTION OF THE SUBJECT.

557. THE inconveniences already referred to that attach to the treatment of subjects such as those now before us in chapters and sections, will not be of much ill consequence if we keep this in view, that what we thus bring forward in a certain artificial order, naming certain elements, whether they be three, or five, or twenty, do, in fact, scarcely ever come before us in

their rudimental simplicity, or as they must appear in a book. Nature seldom offers to our observation these functions of life otherwise than in a state of intimately commingled action.

558. In relation to the wide range of subjects which now come to be considered, it is especially true—or it is true in human nature, if not in other natures—that the machinery of life is impelled far less often by those simple impulses which in theory might seem to be the most imperative, than by motives that have become highly complicated or artificial, and to reduce which to their constituent elements may be extremely difficult.

559. It is a rule which, if it be not universal, is yet of very general application, that the more any motive is remote from its source in some instinct, the more determinative is the force it exerts in ruling the conduct. Material forces diminish as they recede from the centre whence they spring, but, to a great extent, a contrary rule is applicable to moral forces.

560. The instinctive dread of extreme bodily pain, and the consequent endeavor to avoid it when it is imminent, are rudimental impulses, and they are very intense, taking effect upon all orders of conscious and voluntary beings—upon all that live, and that possess a nervous system, with its locomotive powers. But the instances are not by any means rare in which the most extreme bodily anguish has been knowingly and freely encountered, and has been resolutely borne at the instigation of motives which are so nice in their structure and so ambiguous in their elements that to designate them with absolute certainty is more than can be done. Of Ignatius Loyola and of Sir Charles

Napier, it is reported that they endured the most extreme agonies for the sake of a handsome leg. Every surgeon could furnish instances of the same import.

561. It must be a rude philosophy which assumes the rule that those motives or instincts which stand foremost in a scheme of moral science, and which appear to be entitled to a preference on all occasions, do, in fact, always govern human nature, or give law to the conduct and behavior of men.

562. On this ground, again, while we find it needful to take our start on a level with the animal orders around us, we speedily ascend thence, and take position on a level to which none of those orders ever make an approach. The impulses and emotions that have place in human nature, and the existence of which we recognize also in almost the lowest ranks of animal life, take effect with them in their rudimental state, and they operate with a force the intensity of which is directly as its simplicity.

563. Animal appetites and instincts present themselves in the inferior orders much as they do in a methodical treatise, or as they stand in the "table of contents" of a book. But human motives, such as we find them taking effect in the economy of the social system, are not merely complications evolved within the individual man, but they are complications evolved out of other complications within the social system, under the form of conventional habits of feeling and of acting.

564. There are more schemes than one, and each has its recommendation, according to which the emotional elements of the world of mind may be distributively considered, or spread out to view in a tabulated

manner. One such scheme may claim a preference over others on the ground of its comprehensiveness; but let this only be remembered,

565. That the propriety of the scheme we may adopt is to be determined by the issue of a previous question as to the point of view from which we intend to bring human nature into our perspective. For instance, we may choose to think of Man as the most perfectly developed of the vertebrate animals, possessed of more brain than any of his fellows, and having an organization and limbs corresponding to so large a cerebral mass, or we may choose to think of Man as he is seen from his own level of developed reason and feeling; and thus, while we recognize certain analogies which connect him with the lower ranks of animal life, we may quickly dismiss these crude physiological facts, and spread human nature out to view in its prerogatives as a high intelligence, although it be subjected to the conditions of animal organization.

566. Yet again we may ascend to a still loftier platform. Finding, as we must, that some even of the most constant elements of human nature receive no explication, and take no fit place in any scheme which plants itself upon the terrestrial level, although it be the very highest level with which we can there either discover or construct, we may boldly resolve to interpret man by the aid of a theologic hypothesis. We may determine to read human nature spiritually, and then may so draw out our scheme of its emotional elements as to be inclusive of the principles of the moral and religious life.

567. It must not be imagined that when, according

to this last-mentioned method, we have made provision for embracing all the facts or phenomena of human nature (some of which must otherwise be thrown aside as if they were of no significance), we shall stand clear of mysteries and of various perplexities. It will not be so; but the issue we shall arrive at will be nearly the same as that to which the physical sciences lead us: we shall not come to unveil mysteries, but we shall, at least, have modestly noted, and taken due account of, all the facts that belong to our subject.

568. In this elementary book we take our position at once on this last named and higher ground, not because the author is swayed in doing so by a religious intention, but because this is *the only ground* on which all the phenomena of human nature, or, let us say, the circle of facts belonging to our subject—the world of Mind—can receive an explanation that is in any sense intelligible.

569. It is better at once to remit to the hands of the physiologist those subjects bordering upon mental philosophy, in relation to which we find it impossible to observe that distinction between the two departments, a disregard of which never fails to vitiate both sciences (239).

570. A philosophy of the world of Mind need not concern itself with those appetites which find their beginning and their end—their reason complete—in the functions of the animal organization. It is true that Mind mingles itself with these impulses, but it does so in a manner which the physiologist is competent to treat of, and we may well leave him in undisturbed possession of his proper subjects on this ground.

571. There are, however, impulses of an instinctive kind, which, while they relate immediately to the well-being of the *animal*, have a broader bearing, and blend themselves more easily with emotions of a higher order.

572. These feelings present themselves in pairs; that is to say, there is a certain feeling, and it has its antagonist feeling, or its contrary, or its complement, and in various instances that which we must regard as the secondary or subordinate emotion becomes, in fact, the stronger, or the more intense of the two. A *taste* may be pleasurable, and yet feeble; but its opposite *distaste* may be nothing less than a vehement disgust, or even horror.

572. Again, a distaste, very potent in itself, or vehement, may give way to a taste of a higher and of a very placid kind. As, for instance, the distaste felt by most persons, and by some peculiarly, toward objects such as those which offend the senses in the rooms of the animal physiologist, yields to the philosophic taste, which itself never rises to a higher temperature than that of a gentle intellectual curiosity. This effect takes place long before the time when familiarity with such objects has lessened their repulsiveness.

574. Simplicity in its rudiments, and the highest degree of complication in its developments—these are the two characteristics of Mind. So long as we keep this in view, we may have recourse, for convenience, to a methodical treatment of intellectual subjects, without much risk of being led to think that any such method is a mirror reflecting truly the phenomena of nature.

575. A distribution of subjects in this department, which is perhaps as convenient as any other, and which keeps as near to the truth of nature as any other, is of this sort: those feelings, desires, impulses, emotions, which, as these last two words imply, become the immediate cause or the incentive of some course of action or of some single act, may be considered, first, as they stand related to the well-being of the individual (mind and body as one), or, secondly, as they are related to beings around us, like ourselves, and whose well-being affects us, directly or indirectly, as our own. This second includes, of course, whatever belongs to the social affections, whether they be benign or the contrary.

576. Impulses, desires, affections, emotions, sentiments, call them what we may, which fall under either the first or the second of these heads, or which belong in part to the one and in part to the other, may be regarded, in a merely *physical sense*, as *good*, just as we approve of the several parts of a machine when we see that every part, and every function in its movements, is truly related to the intention of the whole—every thing is what it should be, and is where it should be. Thus, for instance, those intellectual emotions of which already we have spoken are good in themselves, and they have their office in developing the powers of the human mind, and in giving to human nature, individually and socially, its utmost enlargement, and its highest culture and refinement.

577. But these same elements—these emotions, whether they be of the first class or of the second—stand related to feelings of quite another kind, and in

consequence of that relationship we involuntarily regard them, when they are in a due condition, as *good*, and when in a deranged condition, as *evil*, in a sense to which we apply the comprehensive term MORAL. The feeling is good or bad, and the action arising from it is to be approved or to be condemned on grounds that are distinct from those on which our judgments rest concerning mechanical constructions, or concerning an organization, vegetable or animal, or concerning human nature itself when it is physically considered.

578. This relationship of all the functions of human nature toward the Moral Sense is of so distinct a kind, and it carries with it consequences so important, that it can never be duly considered or properly treated of, not even in an elementary manner, otherwise than by itself. We are liable to fall not merely into confusions of thought, but into serious errors, if we go on, not duly regardful of the fundamental difference between what is physically good and what is morally good. In this elementary book, therefore, while we keep this momentous distinction constantly in view, we remit the treatment of the subject, namely, the moral aspect of human nature, to another occasion.

XVII.

EMOTIONS RELATED TO THE INDIVIDUAL WELL-BEING.

579. WE should go too far if we were to affirm that what we can not conceive of can not be. This would be to follow the ill example of an antiquated philosophy. We grant, then, that what may be very difficult

to imagine may yet possibly exist, albeit no sample of any such mode of existence comes under our observation in this actual world. For example, it is not easy to imagine how it should be that so frail a mass as an animal organization could be conserved, and that its well-being could be maintained, unless it be made liable to pain, and unless life be held on the condition of possible damage and loss.

580. If the animal is conscious of good, and if, therefore, it may enjoy life, and if powers of locomotion are granted to it, and if it is expected to go in quest of its welfare, and if it is to remove itself from whatever is hurtful, then must it not also be conscious of ill, and be capable of pain, and be liable to suffer from privation? To imagine how things might be otherwise constituted than they are is the business of those who set themselves to construct theories, but in this place we have to do only with things with which we find ourselves surrounded.

581. All species known to us, either in the present animal system, or in those of remote eras that have passed away, exist, and have existed, by means of the antagonism of enjoyment and of suffering. Then these counteractive forces are required to be kept in adjustment perpetually by the instincts—the intelligence—the providence, and the active efforts of the individual animal.

582. Life—and human life here has no exemptive prerogative—life is a good that is to be won and maintained by driving back the inroads of pain. Life is to be fought for, hand to hand, with the destroyers of life.

583. Counteractive emotions, taking their spring

from alternating experiences of pleasure and of pain, or of organic good and evil, are the forces apart from which the rudiments of Mind, so far as we can see, would never be developed. These opposing powers, taking effect sometimes irrespectively of any process of thought—and we then call them instincts—sometimes in alliance with thought—and we call them then emotions—have relation primarily to the conservation of the animal as a sentient organization. And this organization is a framework of so frail a sort that it may be broken, rent, crushed at any moment.

584. Organic good and evil—pleasure and pain—tastes and distastes, are either present at the moment, and thus take effect upon the mind in a direct manner, or they are remembered: they come to be present in Idea, and they are thought of also as contingently future; and it is to this ideal form of any feeling, chiefly, if not solely, that we apply the word Emotion. An Emotion is the thought of pleasure or of pain, either near at hand or remote, in the past or in the future.

585. The one term Emotion is often employed (because we have no better word) comprehensively of all kinds and degrees of feeling, whether they be appetites, desires, hopes, fears, aversions, disgusts, which bear upon the individual welfare: it is applied also to feelings of a very different class, namely, the social affections; and it would be well if we had in use several words instead of one, where the difference in meaning is so great.

586. And in respect also of those emotions of the first-named kind, there is room for more discrimination

than is indicated in the ordinary phrases at our command. The infusorial animalcule, just now awaked from its germ-state, and when it has had no experience whatever of the pain, harm, or violence that abound in the world, is seen to snatch itself up at the least agitation of the water in which it floats, and to gather in its tendrils, or to crouch in its cell. But this precautionary action must be considered as only a function of the nervous system; it is not an alarm of the mind. The same conservative instincts attach to all orders of animals, man included; but it is not of such instincts that we have now to speak: they connect themselves indeed with mind, but they belong more directly to physiology than to mental philosophy.

587. It is when these elements have undergone a reflective process, and have passed through combinations, that they claim to be considered as proper to the world of Mind. Animal good and evil, actually experienced, is thenceforth remembered, and revolved, and repeated in Idea, and thus gives rise to action. It is to this complicate and reflective feeling that the word *Emotion* is applied in its most proper sense.

588. If emotion be thus defined, it can not be known how far the inferior orders come within the circle of this soul-life: they may touch the borders of it, but not more, for to enter farther would imply some development of the moral element; and this must bewray itself in other modes. The being, whatever is its structure and its organization, that, by emotions centred upon itself, becomes a *person*, will be seen to be choosing a path for himself: he will be walking individually in his own way, and to some extent he

will be a nonconformist in relation to his species or tribe.

589. It is much rather on the side of their sensibilities toward man than as related to their own species that domesticated animals give evidence of their participating in the emotional life, or of possessing feelings of a higher order than the merely animal instincts. So far as the dog shows that he has a soul, it is in his behavior toward his master, not as toward his kind: toward his kind it is his instincts only that take effect; but his fond attachment to his master has a depth, and a permanence too, that bring him near upon the borders of those affections which we reckon to be proper to human nature. The attachment of the faithful dog to his master is, moreover, pure of the taint of selfishness, and it is so through the limitation or imperfection of his nature. The animal mind does not ruminate—it does not turn in upon itself: the animal soul wants, as we must believe, the individualizing tendency: it forms no estimate of its personal condition as better or worse than that of others. The dog (so we must suppose) does not think of himself as the happiest of his species or as the most miserable; though he be entirely self-seeking as to his instincts, he is quite free from selfishness as to his mind.

590. But human nature, even in its most degraded condition, gives evidence of this reflective tendency, and every advance in culture and refinement greatly enhances it. Consciousness, with its many elements of feeling, its ever-varying experiences, its recollections, and its anticipations, is, in the cultured man, always revolving upon itself; it is returning upon the trodden

path of its individual history, comparing itself with itself, and with all things and persons around it. It is in this manner that the individual becomes, as we may say, congested and compacted. The man sets himself off from his species; he shuts out invasions; he imparts himself only so far as he wills to do so; he cherishes the feeling of insulation, upon which another feeling will sooner or later come to lodge itself, namely, that of moral responsibility. The course of things is direct and inevitable which has this issue in view; emotions, pleasurable and the contrary, related to the individual well-being, bring on a reverberative feeling—a reflective consciousness; and the next forward step must be taken, which is a tacit confession of relationship to a moral system.

591. Then again, in another manner, out of the elements of those feelings that relate immediately to the individual good there springs a further preparation for the working of a moral system; it is of this sort:

592. The ever-changing experiences of good and evil —of organic enjoyment and suffering—of satiety and privation—pass into the form of motives of action, balanced one against another, or one against several. An intense experience, simply organic, balances often against a complex experience, with which reason has more or less to do, and then the determinative force—the proper power of Mind—comes out in the resolve. Many are the oscillations, many the decisions and the counter decisions which take place when, exclusive of any properly moral influence, what may be called the physical machinery of mind is finding its state of equilibrium.

593. The individual experiences, inasmuch as they have taken their places, at the first, in chronological order, so do they become fixed in that order with more and more distinctness while this interaction of motives is going on. The mind makes for itself a wont-way upon the field of its personal history, and thus it acquires the habit of deriving its motives from sources that are remote from the present hour. The impulses of the moment may be very intense, and they may be of prevailing force; but already they have met a counteraction from influences that are of ancient date in the personal history: so it is that the *now* and the *by-gone* are being brought to an adjustment.

594. The tyranny of momentary impulses is broken when once its power has come to be shared with motives that are of various dates. This simple fact in human nature should be noted, for it is one of its principal distinctions as compared with the animal natures around it, that the momentary organic good or ill touching the individual well-being is a force counterpoised by forces that are not of this instant, but are of times remembered. If we say, as we must, that the immediate force is likely to prevail over a force more remote, we must also admit that, in the actual working of human nature, the result of culture and refinement is to give to remote motives a coherence and consistency which is found to be more than enough to countervail their antagonist. What are the usages of polished society but so many instances of this very kind, in which, apart from any motives that have a moral import, the behavior of the man at the present moment has come under the control of motives drawn from past times?

The personal behavior of the civilized man is the exponent of his history—it is not the result of any self-seeking impulse of the moment.

595. It can not be known how much of depth or of efficacy might belong to these remote motives if they were drawn exclusively from each one's individual experience. In fact, they are never limited as to their origin in any such manner. The individual man takes up, unconsciously, along with his single experiences, all that he sees, hears, or imagines of the experiences of others. The ideal of well-being which has formed itself within him, with the motives which spring from this conception, embraces whatever may have been related and whatever may have been imagined of enjoyment and of suffering that is incident to the lot of man —even the most extreme instances in both kinds.

596. In truth, those emotions that take their rise in our sympathies, and that come within the range of the imagination, usually possess a force very far exceeding that of feelings arising merely from our individual experience. Thus it is that the vigor of the personal conduct—the courage—the activity of the man—his power of endurance—his patient determination, and what is called the "strength of his will," while they bear proportion, *in part*, to what have been his personal experiences as more or less ordinary, and *in part* to his susceptibility of feeling according to his temperament, yet more are they proportionate to the breadth of the view that he has been used to take of the lot of his fellow-men, and to the power of the imaginative faculty, which may so have magnified things actual, and may so have imparted an undefined intensity to

all elements of human life—its good and its evil—as to lift him, in conduct, far above the level to which any motives of self-advantage could have raised him.

597. It is when those emotions which take their rise in the impulses of the individual welfare combine themselves, as they are prompt to do, with the social emotions, and gather to themselves immeasurable force from these sympathies—it is then that human nature puts forth its powers in their amplitude, and that man gives evidence of what great things he may do and endure when every faculty which belongs to his structure has come to take its part in determining his conduct.

598. The difference in *power* between a merely self-intending impulse, and such an impulse when it is combined with motives or dispositions of the social class, is seen in instances such as these: A mere intention, having for its object the animal well-being of the individual man, may be strong in a given degree; but when a feeling of the same kind commingles itself with the thought of others who are imagined, or are known to be competing with him for the goods of life, it becomes intense: it is then a selfishness, which, unless it be effectively controlled, overrides all other dispositions, and tramples upon all sympathies.

599. There are contrary instances that have the same significance, and that convey their meaning in a happier manner. A self-intending impulse prompts us to avoid, and, if it be possible, to retreat from, acute pain; but the instances are of every-day occurrence in domestic life of a free and continuous endurance of acute pain, or of the most exhaustive labors, at the instigation of the gentle affections. The ascetic bears

his burden of self-imposed animal misery at the bidding of motives that are drawn from remote sources, and which have become highly complicated; for it is far from true that a stern religious dread is the principal ingredient in this voluntary martyr's course.

600. It is for the physiologist to treat, severally and in his own way, of those appetites and instincts which belong to the animal organization. In relation to the world of Mind, we have to think of them only as forming a class, and we have to note the place which these feelings and impulses occupy in the structure of human nature as endowed with mind. Then, to determine this place, we must look around to other natures, participants also in the same conservative emotions, but participating therein under very different conditions.

601. In human nature, as we have said, the now-present organic impulse meets, at a very early stage of the individual history, a counterpoise resulting from recollected experiences of enjoyment and of suffering. Each instance of such a counteraction between present sensations and recollected feelings brings the man into a state of complex action, and gives rise to that rumination—that usage of passing to and fro, up and down, upon the pathway of the individual history, of which already we have spoken. The mind, thus falling into the chronological habit, acquires more and more consciousness toward its own continuous welfare. In this way, minds of the thoughtful class live every hour at a much higher rate than the things of the hour would imply. If we might formulate the enjoyment and the suffering—the pleasure and the pain of

each passing period of human existence, it must be in some such way as this: An hour of life in human nature is the present good and ill, *plus* the good and ill of all past hours dimly or vividly reflected upon it.

602. It may be asked, How do we know that the inferior minds around us are not reflective in this same way, or that they do not ruminate upon the condition of their individual lot? In one sense we do not and can not know this, for we can not enter the consciousness of another being. For aught we can know, the animals that crouch on the hearth at our feet may be meditating the deepest things of philosophy. Who can say it is not so?

603. Yet we are not left quite in the dark on this ground. Mind indicates, in one mode or in another, the working of its faculties. The supposition that there are minds which in no interpretable way express in their behavior what is going on within, we should not easily admit. Now the fact of the reflective tendency in human nature indicates itself in many intelligible modes, as thus: that consciousness of individuality which is the product of meditation upon the experiences of past times shows the source whence it has been derived in whatever is peculiar in the conduct and behavior of the man. Man differs from man very much more than do the individuals of any of the lower species differ one from another; and just in proportion as the reflective habit has become more prevalent, so is individual character the more marked.

604. If now we look at the two structures, and compare them—human nature on the one side, and the brute nature on the other side—we must see that, in

the one, provision is made for the exercise of powers which, in the other case, have scarcely any room to develop themselves. Human nature includes and implies a power of determinate action in those cases when impulses related to the individual well-being are held in balance with what is remembered of the past, or, in other words, when the now-instant good or ill is not taken or avoided—is not embraced or rejected—until after some gone-by experiences have appeared in court and have been listened to.

605. It is of no consequence to our immediate purpose whether we apply one theory or another theory to the explication of the mental process in such instances. The fact is this: that human nature includes a power of counteraction of which we find few and feeble, or no traces at all, in any other nature. We may say, if we please, that this controlling force, which we claim as the distinction of human nature, is a force that is itself controlled by an anterior force, and which again, in its turn, is controlled by another higher up, and so on; or, instead of these interminable repetitions, which add nothing to our knowledge of the mysteries of Mind, we may be content to say at once that human nature is endowed with a sovereign power of which brute nature possesses only a rudiment.

606. We may see this difference in progress and coming to view in certain instances. That conservative function of the nervous system which impels the animal to withdraw itself from harm with electric velocity, belongs, in a degree, to all orders of animals, and it is especially displayed in some of the lowest orders of life. Animal life might, with little ambiguity,

be defined in this very way; and we might say that an animal is an organization which shrinks at the approach of harm.

607. So much of this instinctive withdrawment from danger, imminent, as may belong to the nervous system, we should here take little account of; but there ensues very quickly, when the animal is in presence of danger, the next following conservative movement, which, no doubt, belongs to the mind: this is either its using its locomotive means of escape, or the making a defense—a repelling of the threatened harm—by some counteraction. These defensive acts, in part instinctive as they are, often involve some calculation of chances, and then the use of some cautionary expedients, either instinctive or acquired from experience. Instead of any attempt either at escape or defense, some animals use an artifice; so does the eft, which shams itself a bit of stick, and risks the being trod upon as such rather than take the chances of a run across the cellar; yet, if the next heap of rubbish in which it may hide itself be quite near at hand, it will, in preference, trust to its legs. This is mind; this is a ruling among counterbalanced inducements. The fox, and, still more so, the rat, displays some refinement of intelligence in making his choice either of a direct retreat, or of a trick, or ot a courageous defense of himself on the spot.

608. In every instance in which an animal resolves upon an active defense of his life, he imputes an intention to harm him to the object of his dread. He recognizes a mind hostile to himself; and this recognition, unless it be such as to produce abject terror,

awakens anger—an emotion intended to sustain the animal forces, and to exclude dismay, when an enemy seems to be meditating harm.

609. But a difference presents itself at this stage between the brute mind and the human. The animal, when he is accidentally hurt, as by a fall, or by the fall of a stone upon him, does not make the mistake of imputing a hostile purpose to that which has mechanically hurt him: he bears the pain in dumb patience; but the young of the human species, in the exuberance of his own emotional nature, and as he is himself full of purpose and intention in every act, imputes an ill feeling, however absurdly, to the table against the edge of which he has struck his head, or to the stone upon which he has stumbled and fallen. This error may, perhaps, have been encouraged by the foolish woman, his nurse, but the source of it is in himself; and it is only by degrees that he frees himself from the absurdity, as he finds that his petulance exposes him to be laughed at.

610. A few steps farther, but not far, we find the brute mind and the human running parallel on this line, namely, of those emotions that are conservative of life. Anger, in all its degrees of intensity or vehemence, gives way to counteraction in several modes: even the hyæna behind his iron bars throws upon his keeper a look which indicates a mingling of awe with his savage rage.

611. The earliest abatements of instinctive anger are those which it receives from the united suggestions of fear and experience. A prudential calculation of the consequences overrules the heat of the moment,

and represses it; and when we say that it is *repressed*, we mean that it is governed by the mind in virtue of its inherent force.

612. The next step in the course of counteraction is that which ensues when there takes place a complication of anger upon itself in its congested state, as a harbored malice or a purpose of revenge. Many instances are related among "animal anecdotes" which have this meaning: the brute mind appears to be susceptible, in some degree, of chronic anger or malignancy, and therefore animals have been seen to choke the outbursts of passion, that so, by this means, they might the better achieve a delayed and more ample revenge. Human nature, alas! is capable of holding its purposes of revenge entire through long eras, and of shamming love from year to year, while it is watching the opportunity to use the knife of the murderer.

613. The conservative instinct of self-defense, when it has thoroughly kindled the emotion of anger, exhibits its most extreme vehemence when it has taken up another element, namely, a social instinct. Hence the reason of the proverbial instance: we are told that, among things the most to be dreaded, is, not a tiger in quest of his prey, but a "bear bereaved of her whelps." The further from its source, the greater the intensity of feeling; the more it is complicated, so much the more of force belongs to all emotional forces. This appears to be a law in the world of Mind; and an illustration of it the most apt is this of the courage, and strength, and fierceness of the dam when she fights in defense of her young.

614. Yet at this juncture, and just where conserv-

ative anger combines itself with a social emotion, we catch another indication of the difference between the brute mind and human nature: this indication deserves to be regarded. Whether the human infant is ever defended with a determination more fixed than that which screens the young of animals from harm, may be a question; but there is no question when, putting out of view the maternal instinct, we take an example of another kind, in which life-protective anger combines itself with an emotion that is not of the merely instinctive class.

615. Even supposing that some few instances of an ambiguous kind might be adduced in contradiction of what we now affirm, yet broadly it may be affirmed that the brute emotions of courage and fierceness are never kindled at the sight of the sufferings of other animals, even of the same species—certainly not of those of any other species. But human nature in no case whatever so displays the boundless, and ungovernable, and tempestuous vehemence of its emotions, as it does when the compassionate strong man rushes forward for the rescue of the weak, seen to be suffering under the hand of the cruel. This vehemence is barely to be curbed; for it must be death—a tearing limb from limb—vengeance—ample retribution to be heaped upon the inflicter of the wrong: nothing less will satiate this burning appetite or allay its anguish. There are forms of this complex emotion which stand forward as the extreme samples of the moral forces of human nature.

616. These extreme samples, no resemblances of which are discoverable at any level beneath the human,

exhibit all degrees of intensity and of complexity; there is the momentary indignation which is excited in the compassionate by the savage driver of the lamed ox or horse in the streets, up to that swelling emotion of burning wrath of which that savage is the object who is seen to be spending his demon passions upon his victim, the slave.

617. The complexity and the consequent intensity in these instances springs from the accession of one other element, in which the brute nature is no participant, but which, in human nature, has a force far surpassing every other. This new ingredient is an emotion of the moral life.

618. The instinctive impulse to resist or impel bodily harm is, as we have said, instantly followed by the emotion of anger when an intention to inflict this harm is imputed to him who inflicts, or who threatens to inflict it. But the mere emotion of anger seldom, if indeed ever, stops short in itself, or fails to ally itself with the all-powerful emotions of the moral sense. The imputation of an intention to inflict bodily harm upon me, or upon others for whom I care, rouses anger, wrath, rage; but not these emotions merely; for, whether I will or not, I go on to impute to my assailant *wrongfulness* as well as violence, and this imputation quickens the passions which it finds, imparting to them a tenfold vehemence.

619. Just as the infant foolishly imputes Mind to the stick that has hurt him, so I may, at the moment, and with as little reason, impute a bad moral intention to my horse, who refuses to pass the object at which he shies; but an error of this kind does not maintain

its place beyond the first moments of vexation. In proportion as I feel myself warranted in imputing moral motives to the perpetrator of a violence—that is to say, when I regard him as unjust, cruel, *wicked* —every feeling which the occasion has called up is vastly increased in depth and vehemence; and when rendered intense in this manner, these feelings may impel the man even to an act of self-immolation. In such a case—and such instances occur on the page of history—the circle of the emotions has fully come round to the point of its origin as a contradiction. The instinct of self-preservation was the starting-point, and self-immolation is the end to which it leads.

620. Far is it from being true, in fact, that the elementary principles of human nature offer themselves to view ordinarily, or often, in their simple condition. The question might be put, Do we ever meet with them in any such state? Human nature, as compared with brute nature, has this constant characteristic: that it runs on, with instantaneous speed, from its rudiments into complexities of some kind, and it shows its energies—its boundlessness of passion—its powers of endurance and of daring—it displays itself as a force of unmeasured compass when it has nearly reached, we may say, the confines of its limits of action—when motives too attenuated to be severally and distinctly recognized have become commingled so as to constitute *a habit of feeling*, and to be the distinguishing characteristic of the individual man.

621. Take the instance of the accomplished soldier and gentleman, many a sample of which may be found on the steps of the British throne without lighting a

candle. He has a full personal knowledge of what his profession may some day cost him—bodily damage, and mutilation, and the anguish of long years—death being the least of the ills in his catalogue; yet he cheerfully encounters all; and in what mood of mind does he do so? It is a mood highly complicated, and which has gone off to a remove immeasurably far from its rudiment. The soldier we may think of as the representative of that first rudiment of animal life, the instinct of self-defense. And yet, even with men of the plebeian order, the *fighting element* has passed into a complex sentiment; but as to the man of rank and of lofty professional feeling, the fighting impulse exists only as a germ that has done its office in the character, and is lost. The calm valor of the gentleman-soldier—the man high born, whose ancestors bled for the white rose or the red—impels him to dare more and to suffer more than his inferiors in the ranks can imitate. He is more brave, and more patient of hunger and thirst, and of bodily anguish, than is the stout son of one of his tenants, but as to his motives, one might compare them, for complexity, and for fineness and elaboration, to some richly-inlaid piece of furniture at home, that is as ancient as the earldom; and yet, with the gentleman-warrior, while the truculent element is at its minimum of force in his nature, a compassionate generosity is at its maximum; for while the man is as daring as the buccaneer, and as patient of suffering as any Red Indian, and is the one to go in front of every desperate affray, he is as warm and as gentle in domestic life as his mother and his sisters.

622. We may thus trace one of those instincts

which relate to the individual well-being up from its source, where it appears only as an animal impulse, and may follow it through its stages as it complicates itself first with social emotions and then with moral sentiments; and when that, in respect of which man appears on a level with the natures around him, has conjoined itself with elements with which they do not at all participate, the ultimate product exhibits often those lofty qualities which impart grandeur and depth to human life—private and public, domestic and historic.

623. All this may be: the moral element may largely have come in to mingle itself with the social sentiments and affections, and to lift the man above the level of the animal, and yet that which, in a proper sense, is *morally good* in actions or in dispositions may not have been included. Virtue, or the contrary —goodness, or its contrary—may still be undetermined in the character. This higher determination must have place on other ground than that which we occupy while we are considering human nature physically only.

624. All that is needful at this point is this: that we should just be aware of an important distinction, and should see the grounds of it. At some future time, the entire subject, momentous as it is, may engage our attention.

625. What we have here called an elementary impulse, the intention of which is plainly to promote and secure the individual animal well-being, quickly becomes complicated, as we see, first, with prudential considerations, which modify or restrain it; secondly,

with social sentiments, whether these be benign or the contrary; and then with those deep and intense emotions that spring from the moral sense. But these emotions also may reach the highest pitch, and yet may fail to include what is virtuous or praiseworthy.

626. The brigand of the Apennines is, in a word, the wild beast of a sensual, self-seeking existence. He risks all things that, at snatches, he may live like any cardinal, in the fullness of voluptuous satisfactions. But if his daily course of conduct, if its doings and its endurances were to be analyzed, the larger part of the whole of this outspend of energy, bodily and mental, would be claimable on behalf of his social sentiments. His pride and ambition as captain of the troop—his jealousies, his heart-burnings, his vanity, his moroseness, his generosity too—all these feelings have no meaning apart from the social sensibility—even those rudimental emotions which bind man to his fellows, and bind him, whether by antipathies or by sympathies.

627. Yet this lawless being, sensual as he is, and ferocious perhaps, nevertheless in a genuine sense is generous, and he is punctilious too in matters of honor; he is also, in a deep sense, the creature of moral feeling; and, moreover, he is devoutly religious—more truly, and far more seriously, is he a religious man than many a dignitary of his Church. His moral emotions are potent and unsophisticated, although they are grievously misdirected; and his fervent piety is not enfeebled by knowledge and disbelief. The brigand, in his gloomy hour, is fighting with his remorses, just as, in the dark, he might be striving to strangle snakes that had coiled under his pillow. Then he labors hard

to right the uneven balance at the foot of his Conscience-account by acts of mercy, by rescues effected for the widow and fatherless; and, above all, he would do much—he would do any thing short of forsaking his profession—if he might only restore himself to favor with his patroness saint, who often, at dusk-light, gives him, he thinks, a reproving shake of the head and a frown. The brigand of the Apennines, who has merited the gallows a hundred times, and who lives for voluptuousness, is eminently the creature of social sentiments; he is intensely the moral being; and he is a man of worship—of worship without hypocrisy.

628. If we were to take as our guide, in going over the field of human history, certain systems of human nature, we must resolve to reduce all its infinitely diversified phenomena to the poor insignificance of a machine, upon which lines of suggestions, like parallels of ribbon in a silk-weaver's loom, are moving forward; and if *self* gives law to the volitions, then the will is determined always by the most glaring of the colors and patterns which catch the eye as they pass. This sort of philosophy fits well enough such an instance as that of the usurer bolted in with his bags, who is calculating the product at the year's end, and inquires, "Shall I lend my money at a low rate with a high security, or at a high rate and great risk?" After working this problem, he gives his answer accordingly to the importunate applicant who is knocking at the shutter.

629. Take the instance of the most thorough selfist we can find; but only let him be the creature of passion, and then his tumultuous and tempestuous course

will be explicable on no scheme whatever which frigidly resolves human nature into principles that may suffice for the explication of brute nature. Brute nature has its emotions, but they do not run into complications. In human nature the germ emotions collapse one upon another with organic vehemence, and out of these combinations spring boundless energies of action and of endurance. But, before we can comprehend any such course of action, we must allow ourselves to believe that, in human nature, love is more than a euphony for selfism—hatred, jealousy, remorse, more than the reflex motives of a defeated self-interest appetite. These words, and the cluster of associate terms, are significant of realities which take their sweep in depths that are not sounded by a closet-made philosophy.

630. It is enough if here we indicate the fact, already mentioned more than once, that as to human nature, whatever ot greatness, whatever of energy for good or evil, whatever of individual coherence and unity of intention it exhibits, are the products, not of single elements, but of complications of elements, and that, as a rule, the more intricate the complication, the more distinctness and force is there in the product.

XVIII.

CEMENTING EMOTIONS OF THE SOCIAL SYSTEM.

631. ALMOST every writer upon the philosophy of Mind has had occasion to complain of the unfitness of language, laden as it is with colloquial ambiguities, for

conveying with precision and certainty abstract ideas and intellectual distinctions. These complaints are well founded, and the inconveniences referred to are to be obviated as best we may by aid of abundant illustrations and by some repetitions.

632. And yet this admitted defectiveness of popular language, when we must use it as the medium of analytic and abstract thought, is balanced by a compensation which we meet with on another ground. If language conveys intellectual and moral notions *defectively*, it nevertheless brings before us, in the most unexceptionable manner, that mass of facts with which we are concerned in the fields of Mental Philosophy. A language which well meets the wants of a people among whom human nature has freely developed itself, and which answers the requirements of the intellectual, the practical, the poetical, the moral, and the religious life, contains in its vast stores a trustworthy index to every fact of the people's consciousness: these stores are vouchers for every thing which the mind of the people has actually realized within reach of these departments of thought, of action, and of feeling.

633. To this voluminous index of the thought and feeling, and of the infinitely varied experiences of all orders of Mind, we may make our appeal with perfect confidence. This index will not—*it can not* lead us astray. Whatever is contained in the *Language* of a people is contained also in the *Mind* of the people. When words are put together in sentences or propositions, they may affirm what is not real or true, but the *words* which are so put together are infallible evidence of the existence either of things seen and known, or of notions or feelings proper to the human mind.

634. If I affirm that a ghost appeared to me yesternight, and gave me such and such information, this affirmation may be wholly untrue; for what actually occurred might be either a trick practiced upon me, or it might be a branular illusion. But now the word *Ghost*, which is a term colloquially current, and to which an idea of some sort, even if it be vague, is attached by all who hear it, this word *is index to a fact in human nature*, namely, the belief, every where prevalent, of unearthly or supernatural appearances. This belief, then, is a fact belonging to the philosophy of the human mind.

635. If I affirm that the hearing of music and the sight of beauty in nature excite emotions which are not derived from any "association of ideas," or from any circuitous or factitious sources, this may be true or not true. But it is certain that the words *Harmony*, *Beauty*, *Melody*, *Sublimity*, and also all those words that are expressive of the feelings and tastes excited by sounds, and by sights of a certain order, are sure indices of facts in human nature, and they are facts which Mental Philosophy ought to take account of.

636. Or if we take up, as the leading terms in a class, the words *Love*, *Sympathy*, *Compassion*, and others resembling these, or their synonyms, and then bring together, under and around these, the many hundred words and forms of speech which are of kindred import, we have then in view a vast mass of facts indicative of certain principal elements of human nature, and of certain usual combinations and interactions of these elements.

637. I may affirm concerning Love, and Sympathy,

and Compassion, and Benevolence, and Philanthropy, many things that are untrue, or illusory, or extravagant, but it is certain that if the notions that are excited in most minds by these words, and by the customary combinations of them, were wholly illusory and unreal, in that case no *copia verborum* so rich as this, relating to the social emotions, would ever have found a place in the language of any people. Instead of several hundred words and phrases of this order, a half dozen terms, or fewer still, would amply have supplied the needs of the mind in expressing whatever it is conscious of in its relations with other minds.

638. There has always been much controversy on this ground. Wherever men have given themselves to the pursuit of Analytic Thought, a strenuous endeavor has been made to resolve certain emotions and feelings into their supposed elements, and in tracing them to such elements, to show that the popular belief concerning them is illusory.

639. Besides the legitimate philosophic impulse to analyze whatever may indeed be analyzed, there is a strong tendency in minds of a certain class—the splenetic and sarcastic by temperament—to denounce, or to ridicule as hypocrisy and pretense whatever in human nature wears the aspect of generosity, sincerity, magnanimity, virtue. Hence it has happened that the strict annalist, who is usually a man of mere reason, and of little or no feeling, has found willing coadjutors in the class of the brilliant and flippant, who win an easy triumph in exhibiting human nature vilified and brought down to their own level.

640. So far as abstract discussion and argument

may actually have an influence in the formation of our moral dispositions, it is important—in truth, nothing is more important in the region of Mental Philosophy than that we should well understand the grounds of the controversy which is just now in view.

641. Those facts of the case now before us which admit of no dispute are these: the language of every people that is advanced in civilization and in moral consciousness abounds with words and phrases expressive of benign emotions belonging to the relationships of domestic and civil life. These familiar words and phrases carry a meaning, more or less deep and full, into all minds; and they carry a meaning that is perfectly distinguishable from certain other words and phrases, which are employed antithetically, such as the words *self-love* and *selfishness.*

642. Farther than this, it is a fact not questioned that what may be called the *antagonistic* words and phrases, or those which designate the opposite emotions, such as *Anger*, *Hatred*, *Malice*, *Revenge*, *Envy*, and many more, are truly understood by all men, learned and unlearned, when taken as expressive of genuine and uncompounded states of mind. Thus it has never been affirmed, either by philosophers or by satirists, that hatred is a mere disguise of love, or that revenge is a circuitous form of benevolence, or that envy and jealousy are well-wishing hypocrisies or amiable pretexts. We all take these terms to mean just what they appear to mean; nor have the most severe analysts of human nature forbidden us to entertain this, which is our spontaneous persuasion.

643. The only controversy which has ever been

urged on this ground is that relating to the import of the first-named class of words, of which *Love*, *Sympathy*, *Compassion*, *Benevolence*, *Philanthropy*, are among the principal. On the one hand it is affirmed, consonantly with the spontaneous suggestions of our consciousness, that Love, Sympathy, Compassion, Benevolence, are pure elements in human nature, and that they are not resolvable into any forms or disguises of self-love or selfishness. But, on the other side, by those who profess to follow a more strict analysis, it is affirmed that there are no emotions whatever which may not, when rigidly scrutinized and reduced to their constituents, be shown to be nothing more than reflex forms of that one sovereign impulse which urges each individual to pursue his separate and insulated good; in other words, that there is no Love which is not Self-love; no Sympathy which is not "a feeling for myself;" no Benevolence of which "my particular ease, comfort, and welfare" is not the reason—the beginning and the end.

644. How shall so grave a question as this be decided? Never by the means of logical argumentation. Herein it resembles the question already spoken of concerning the Freedom of the Will, or the proper causality of Mind. It is a question concerning elements in human nature, and therefore it admits of no other *direct* proof than that furnished by an appeal to every one's consciousness. Then there is this peculiar difficulty attaching to the question concerning the simplicity and genuineness of the benign emotions, namely, that among those who take part in such a controversy, there are many (and especially those who take the

negative side) whose personal consciousness answers very doubtfully to the appeal which we must make to it. Not only are there multitudes of persons from whose natures the benign affections have almost been expelled by the indulgence of evil dispositions, but there are more than a few in whom the moral life is constitutionally so feeble that scarcely is a pulsation of the social emotions to be perceived in them: they have no unquestionable consciousness of this order. Such persons, therefore, will think themselves warranted in denying, as to other men, that of which they find no clear indications in themselves.

645. At first sight it may seem strange that, while the malign emotions have been admitted to be unmixed and genuine, or to be, in fact, what they appear to be, the benign affections are alleged to be factitious, and that they carry colors which a stern philosophy is bound to snatch from them. The reason of this apparent inconsistency is not very remote.

646. On the rarest occasions only is there any temptation to simulate the benign passions, or to pretend to hate where we do not hate. Seldom indeed, if ever, do we feign envy or jealousy; seldom, if ever, are we false in falseness. Therefore it is that, as to the malign affections, there are no current counterfeits of them: such as they *seem* to be, such they *are*.

647. It need scarcely be said that the case is the very reverse of this as to the benign affections. Love and Benevolence are indeed the fine gold and the silver of the social economy; they constitute a medium that is intrinsically valuable, and therefore it is that the temptation to pass a base imitation of them is almost

irresistibly strong; and therefore it is that when rigid analysts or sardonic writers address themselves to the task of convincing the deluded world that gold is brass, and that silver is tin, and that rubies and sapphires are colored glass, they find at hand piles of instances fit for the establishment of their doctrine; and if ten are not enough, they can bring forward a hundred, or a thousand, or as many more as you will ask for.

648. It would be quite beside our purpose in this book to enter upon any ground of controversy; nevertheless, it is unavoidable that we should refer, in passing, to grave questions when they are of a kind that touch first principles, and that take effect upon the opinions of educated persons. Such is this question concerning the genuineness and the elementary simplicity of the benign affections. We advert to it, and must continue to do so as we go on; yet, in doing so, it is not on the presumption (which would only lead to disappointment) that those who deliberately take the contrary side may be brought over to what we think a better opinion, but for this sole purpose—that those who, by the constitution of their minds, are open to the reception of this (as we believe) better philosophy, should be aided in ridding themselves of the entanglements of (as we believe) a worse philosophy.

649. The born blind make great attainments by means of the senses they possess—hearing, touch, taste, and smell—in acquiring a knowledge of the external world, and, so far as it goes, it is true and exact knowledge. But now, if to one born blind, sight, with its acquired perceptions, be given, then, if you ask him what the universe is, such as he *now*

knows it to be, his answer will show how immeasurably far the perceptions of sight surpass all other perceptions taken together in bringing us into correspondence with the real world; the real world is that world with which the eye is conversant: light is knowledge as to all things material.

650. Then, when we put this question, The world of Mind, what is it? It is such as to its primary elements as we have already enumerated them in our catalogue. But beyond this, the world of Mind (the brute mind now quite forgotten) is the world of sympathies and of LOVE.

651. If any ask me "What is Love?" I have—I can only have one answer for them, and it is as reasonable an answer as that which I give to the question "What is Light?" Light is that of which you are conscious in daytime when the eyes are open. Love is that of which you are conscious when a being like in nature to yourself is thought of or is in your view, and who has become the object of emotions of the same order as those that relate to your individual well-being, but which are immeasurably more intense and profound.

652. If you tell me that you have no consciousness to which any such statement could in sober truth apply, and that you are never so absurd as to forget yourself in your regard for another, I have only this to say, I can not teach you so to feel. You may remonstrate, and may affirm, and may truly affirm concerning yourself that you are reputed among your neighbors to be a kind-hearted person; that you are not untouched with a spectacle of suffering; that you

enjoy the sight of the happiness of those around you; that you believe yourself to be conscious of love, and you think that love is one of those ingredients in human nature which may be analyzed; and that the mode of its origin in our minds, by help of certain "trains of association," may convincingly be shown; and you tell me, moreover, that this has actually been done, with great precision, by several noted writers, as thus:

653. "The states of circumstances in which the feeling (friendship, here taken to stand as the generic term for Love) originates are very numerous. But they are all, without exception, of one kind. They are all states of circumstances in which a greater proportion than usual of *our own pleasures* come to be associated with the idea of the individual." "Community of pursuits" may be the origin of such feelings: "the idea of the individual, upon the whole, is a highly pleasurable idea." Besides, our knowledge of "his benevolence toward us makes us count upon his services whenever they are required, and his reputation and influence in the world are such as to give weight to his endeavors." This is, indeed, an *intelligible* philosophy of love, and so is the following:

654. "The idea of a man enjoying a train of pleasures or happiness is felt by every body to be a pleasurable idea. The idea of a man under a train of sufferings or pains is equally felt to be a painful idea. This can arise from nothing but the association of our own pains with the second. *We never feel any pains or pleasures but our own.*"

655. Nothing can be more intelligible than this

analysis of the social affections. It exhausts the subject so far as it is understood, or so far as it has ever entered into the consciousness of a man of frigid, calculating intellectuality—a man whose views and opinions are ruled by the fibrous and wordy structure of his own mind. To minds of this class—and it is such, often, that have given us our notions of the philosophy of human nature—whatever can not be set out in propositions, whatever can not be spread out in paragraphs and chapters, is as nothing. Writers of this order say, what is quite true when they say it of themselves, We know of nothing which we can not make known to others in words; we have no consciousness of any thing which pretends to be incommunicable in that mode.

656. There can be little need to affirm a truism such as this—"that we never feel any pains or pleasures but our own." Yet it is well to remember that there are emotions far surpassing all others in depth and force, which have no direct bearing upon pains or pleasures, enjoyments or suffering, either our own or those of others. Pains and pleasures, enjoyments and sufferings, and the ideas of both, come to cluster around such emotions, and they are seldom far remote from them, but they are not of their substance. It is at this point that logical utilitarianism and political-economy philosophy lose the path, and egregiously misinterpret human nature.

657. The notion that nothing is *real* but the good things of life is the bottom truth (falsehood say) of some modern systems. Theories which plant the right foot upon atheism will be seen to plant the left foot

upon sensuousness, or, as it is called, for euphemy sake, "material good." If we build our belief upon this basis, then it is a matter of course that LOVE is that emotion which ensues when a "greater proportion than usual *of our own pleasures* comes to be associated with the idea of the individual" (loved). And if we are content to build our philosophy of the world of Mind upon this basis, then it is certain that friendship is nothing more than the feeling we entertain toward any one of whose benevolence toward us we are assured, and upon whose "services we may reckon *when required*," and whose "reputation and influence in the world are such as to give weight to his endeavors."

658. The world of Mind is, as we believe, susceptible of an interpretation differing essentially from this, and it has depths immeasurably deeper than these shallows. But as in regard to certain intellectual faculties—the power of abstraction especially—and as in regard to certain tastes—the sense of the sublime and beautiful, for instance—and as in regard to certain moral perceptions, individual minds, nay, many such, are totally wanting in these elements, so as to Love (not as a phase of selfishness) there are multitudes of beings—worthy people too—to whom it is utterly unknown. This fact may be perplexing, but it is not in any way questionable.

659. The tendency of philosophic thinking in recent times has taken a direction toward the well-being of the masses of mankind—the industrial, and the classes below these—the indigent. But this tendency, good and benevolent as it is, and from which many important reforms have sprung, has been to vulgarize phi-

losophy itself. With a show of demonstrative simplicity and certainty, and with the help of tables and statistics, it has carried its dogmas triumphantly, *first* by excluding from its regards whatever may not readily be put into propositions, and *secondly* by claiming great merit on the ground of its practical bearing upon the intelligible interests of the "masses."

660. The human system as a social mass is clustered, and grouped, and cemented, not by Love merely, but by various sympathies—by instincts, by communities of interest and taste, by congruities of feeling, and by antipathies and antagonisms; for whatever acts as a repellent force in one direction does not fail to act also as a force of cohesion in another direction. Looking abroad, therefore, upon the social economy, and seeing it thus bound together by many affinities, philosophers of a certain class, or men of mere reason, destitute themselves of these emotions that have a deeper seat, deny the reality of what has never entered into their personal consciousness; nor do they encounter abroad any facts of an obtrusive kind which may not easily be reduced to system, or be made to harmonize with a sensuous and selfish theory of human nature.

661. Those who would gladly adhere to a better philosophy than this may find the means of confirming themselves in their belief of it by following a clew of analogy, as thus: in every advance which we make beyond the instincts and the sensuousness of infancy, we acquire, as already said, the habit of reflex consciousness, and of meditation upon our individual lot and condition; we become thoughtful in the chronolog-

ical sense; and in thinking more of the past and more of the future, we live less upon the hour now passing.

662. In minds of the commonest order, this habit turns much or entirely upon the pains and pleasures, the animal good and ill, that may have attached to the individual lot, and that are likely to attach to it in future. But in proportion as the mind, by original structure, is of a higher type, and in proportion to its culture also, and as its emotions come to be of a purer and more expansive order, and as the views of life are less contracted, in this proportion the meditation of self, the individualizing consciousness, is less and less exclusively occupied with pains and pleasures, past or anticipated; the individual feeling contains less of the character of simple self-regard. What is it, or how shall we give expression to that order of feeling which supervenes, and which dislodges the selfism, and which brings into the place of it a broader consciousness—a consciousness of being—pains or pleasures, good or ill, not considered—life not thought of as desirable or as undesirable?

663. Now a step onward from this point is before us. We have said more than once that, in human nature, whatever comes to act at a point remote from its source shows more force and develops more the energies of Mind than that which is proximate and simply organic.

664. Assume, then, this, that a personal consciousness, remote, as far as may be, from sensuousness, and from selfishness, and from sinister calculation—assume it to be in daily communion with one who is fitted to become the object and centre of an order of feeling not

resembling this, but identical with it. From this feeling the idea of self has been expelled, and that which occupies the consciousness is that which it would be absurd to attempt to make known by analysis or by description, for it is a pure element, and it can be known only in so far as it is felt.

665. It is quite true that Love must always desire, and that it will seek to promote the welfare of its object, and that it will do, and dare, and endure all things to avert suffering or privation from its object. But these desires, and these cares and labors, are *incidental* to Love; they are not of its substance.

666. When we affirm, as we must, that multitudes of persons, and many estimable people too, have no consciousness of any emotions beyond those which may easily be described, and which may be traced to their sources in a better sort of selfishness, it must not be inferred that emotions of a deeper quality are rare, as exotics, or that they are mere refinements nowhere to be met with but in the high temperature of Platonic saloons. It is not so: genuine love is the broad substratum of the social system in all ranks; it spreads itself out to the sun at the doors of cottages as well as in saloons. Love, deep, warm—absolutely unselfish and martyr-like as to devotedness, is often rough-handed and rough-visaged, and homely too in its utterances. Love is, indeed, very choice as to *some* of its conditions; it is keenly discriminative, but it is not fastidious.

667. We must not look for Love in any such places as these—not in the lower conditions of savage life, nor among the most degraded and wretched beings of

a dense population. We must not look for Love among the sensual and profligate, nor among the sordid, and penurious, and calculating, nor among those whose sympathies have long been quite worn out by the attritions of a factitious existence amid frivolous pleasures and amusements. We must not look for Love in the hearts or homes of the proud, or the sullen, or the malign, or the jealous, or the egotistic. But when we have made these and such like necessary exceptions, then we may confidently look for Love in all ranks, and we shall find it, fresh and pure, in many a home from which fastidious tastes and cultured habits would impel one to shrink; we shall find it in homes which it is a delight to look into for an hour, but in which it might be a severe trial to abide as an inmate for a week.

668. Those domestic instincts and those quick sympathies which so usefully take their range within the social system, and which prevail, for longer or shorter periods, in every home circle—these emotions, which form the ordinary cement of our social existence, have this characteristic, that they are temporary in their hold, and are more or less easily transferable from person to person. Endurance, and inconvertibility, and fixedness upon its object is the characteristic of LOVE, as it is distinguished from the benign sympathies, and from any sort of fondness that is merely instinctive. Love challenges for itself immortality, and its surest criterion is the passionate grasp it takes of the word forever.

669. Fond instincts, and kindly sympathies, and benevolent impulses—these are *solderings* of the social

system, without which nothing could retain its place in the machinery of life; but Love is a *welding*, in consequence of which the two masses constitute thereafter one substance.

670. We have said that Love, although it is never indifferent to the pains and pleasures of the person loved, exists irrespectively of these, and still more absolutely is it remote from a calculating regard to its own pains and pleasures, thought of as derivable from him or her. But there is another characteristic of this genuine emotion which demonstrates how deep it is rooted in human nature. Love, although it can never be indifferent to the *moral qualities* of its object, may exist and may endure irrespectively of these. Love is persistent when complacency and approval have quite died away. We ought to believe that even this power of endurance will find its limit somewhere, but such a limit will be found far beyond the boundaries where we must place it if we follow the guidance of a self-seeking theory of human nature.

671. Although Love is not irrational, it is not in its nature to be reasoning: it is anterior to considerations that are approvable to reason; it is deeper seated than discretion, because it is deeper seated than that self-love with which discretion has to do. Upon this foundation, where it exists, the social sympathies, the feelings of general good-will and kindliness, as well as some more intimate affections, take their position, and give coherence to the domestic system. But even these less profound feelings strike deeper than that reflex selfism into which the social emotions have been resolved by some writers. In the vivid emotion of

sympathy with suffering, and in the outbursts of compassion, and in the impulse to relieve distress, there is no calculation—there is no running in-doors to see how this case of suffering may touch us at home. It is a direct and spontaneous emotion, uncompounded, pure in its intention, and repellent of every sinister suggestion of cold discretion.

672. It may be true that Dives, and, in like manner, his descendants in every age, will wish that Lazarus would lay himself down any where else rather than on the steps of his mansion, and it may be true that he would not grudge to send him a mess of savory meat, only it must not be eaten within sight of the rich man; but it is not true that the man of Samaria, who made a halt upon a dangerous path, did so for the purpose of relieving himself from the disagreeable sight and the painful recollection of a man bleeding and dying without help. Philosophical analysis may be at home while it is dissecting easy sympathies such as those of Dives, but it proves itself to be utterly blind when it attempts to handle human nature, such as it is developed in the breast of the compassionate Samaritan.

673. The intense maternal fondness may be regarded as in part an animal instinct, and, so far as it is so, human nature may seem to differ from the brute nature only in *degrees of feeling.* But there are instances—and they are not rare—which stand clear of this ambiguity, and which carry momentous consequences. Even if such instances *were* rare, they would yet be conclusive; but they are of frequent and common occurrence, and they may easily be found,

if only we have an eye to see them. Take so familiar an instance as this·

674. In a January afternoon a freezing sleet is driving through a dismal court of a murky town. Upon the wet and muddy steps of a hovel I find a child seated. She is not naked, though it can barely be said that she is clothed. She hugs an infant on her knees, blue-visaged and squalid. She is pulling and pulling her own tattered skirt this way and that, so as, if possible, to screen the blain-smitted feet of the baby from wet and wind. Why does she sit there? Her mother has gone out, and has locked the door, and has told her to take care of baby till she comes back; and she does so; but she does it, not from teaching or from imitation, nor yet to save herself from cuffs when her mother returns; she does it from no reflex or self-regardful feeling; she does it because human nature is built upon a broad basis of genuine sympathies—a foundation as broad as are those thousand forms of misery and degradation among which the human family has sunk down.

675. The mystery of these miseries and degradations human thought hitherto has not cleared up: a dark abyss it is; but there is at least one aspect of the subject whereupon a light shines. If there be misery and degradation in the world, yet a provision is made, and it is a large provision, and it is ready at hand, and it is quick in its application, and it is fit for assuaging suffering and for lightening the weight of care, it is a provision of sympathies, not, indeed, surpassing the occasion, but yet it is always tending toward a commensurate extent.

676. When we complain, as so often we do, and justly may, of the selfishness of mankind, the real meaning of all such complaints is this: that whereas human nature, broadly distinguished as it is on this ground from the brute natures around us, includes feelings which, if they were always in vigor, would entirely prevent or remove many causes of suffering, and would mitigate what they must fail to remove: these sympathies are quite wanting in some minds, and are feeble in many minds, and are counteracted or are vitiated by malign impulses in many. Human nature is sympathizing in its structure, but too often it is wanting in these elements.

677. The social system receives its life and warmth from Love, much as the earth receives both from the beams of the sun; yet this genial influence is slow in taking effect. But sympathy is as the lightning; it is quick as thought; it waits not to make its selections; it is irrespective of considerations, and of partialities, and of tastes, and of cold prudence.

678. If the stone on which I have set my foot proves to be loose, I catch hold of my companion's arm, and I do so without ceremony or the intervention of a thought; or if I see that my companion is in danger of a fall, I catch hold of his arm to save him without ceremony or the intervention of a thought; or if on my path I find some one—a stranger—who has just fallen and has broken a limb, and is bleeding, I start forward without ceremony or the intervention of a thought (on the supposition that I am no descendant of the priest or of the Levite). Now, when I come near to the suffering man, how does the sight of his

wounds and the hearing of his moans affect me? To answer this question, let me suppose, instead of the case before us, that

679. I am myself the sufferer; and now I not only *see* a compound fracture, but *feel* it. The organic sensation in this case is doubtless much more intense and vivid than any sympathy can be in the other case, but yet the sympathy takes a much deeper hold of the mind than the pain does. The bodily pain is all my own; it is a definite ill; I know the worst of it; I bear it with a manly resolution, and I calmly look about for the means, if there are any at hand, for getting myself relief. But the sympathy that is excited by the suffering of another wakes up my whole nature, constituted as I am. This emotion so spreads itself throughout me as that mind and body are commoved at once, and both are roused to action, and all take this one direction toward the sufferer; and whereas, in the other supposed case, I should endeavor to help myself at the suggestion of reason merely, now that another is the sufferer, reason does its part at the impulse of many concurrent feelings.

680. In these outgoings of spontaneous sympathy, Love may be present or not present. The two kinds of emotion are clearly distinguishable, and they are more often found apart than conjoined. But the sympathies consort themselves in several different modes with the instincts that are peculiar to the domestic system, and in this combination they become so intimately commingled one with another as not to be distinguishable. With composite emotions of this kind, Love mingles itself in greater or in less degrees; very

feebly sometimes, even where instinctive sympathies are vivid and intense.

681. The domestic scheme of life includes a set of emotions which well enough subserve the purposes toward which, obviously, they are related, even when there is a very small admixture of Love. But when Love, as a fixed, permanent affection, binding together individual persons, is superadded to domestic instincts, then there takes place an entire absorption of all self-intending desires and thoughts, and a supervention of emotions which have become homogeneous, as if by the incandescence and fusion of the elements. This ultimate product must ever defy philosophy, for no analysis of it can be effected, no explanation given of its origin, no forecasting of what it may issue in, or the course of action it may lead to.

682. The conjugal affection, and the parental, and, in a lower sense, perhaps, the filial and the fraternal —these affections are but several modes of one species of feeling, and it is that in human nature which by itself (though it be not alone) would bespeak for man more than the brief term of existence which the present life affords him.

683. An elementary book is not the place for saying what might be said of the deepest of all human affections, that of the conjugal relationship. We drop this subject, therefore, and we take up that which stands next in order, namely, the parental and filial.

684. In human nature, whatever we meet with that is the best and the most rare, and which stands highest in the scale of intelligence, or of moral action, or of feeling, is to be taken as the genuine, or the *normal*

instance, and as the *true sample* of the mass. Whatever falls below the highest mark is to be regarded as a departure from the canon; it is an accidental abatement or a default which we need not take account of. The *mean* instance of human excellence is not to be regarded as a fair sample of humanity any more than we should take as a representative of the human form an individual, one of whose limbs was only a quarter of an inch shorter than the other; for to do so would not be warrantable on the plea that men may be found one of whose limbs, instead of a quarter of an inch, is four inches shorter than the other. If the question be, What is the human form? we answer, "You see it in the Apollo and in the Venus."

685. Or if the question be this: To how great a remove from that pure selfism of which a dry philosophy takes account, human nature may advance, we may find an answer among instances which, if they are not the most common, are far from being infrequent —that of the parent and the child; or let us now say, the father and the daughter. In many, many a home, these so stand related in love as that the self-thought of both has passed off, and can be detected in no instance of conduct on either side. If we thus take as our instance the father rather than the mother, it is because the maternal relationship includes an *instinctive* fondness, which is not easily set off when we are thinking merely of the parental sentiment. The conditions of a parental affection into the composition of which there enters nothing of selfishness are these two:

686. The first is this, that the *personal feeling* of the two beings is still distinctly conserved by aid of

those reserves, those delicacies, those conventional habitudes which belong to the paternal and filial relationship; for the more the individuality ot any two beings is conserved, so much the more intense will be that affection which binds them together, and which dispels the selfishness of both. The *second* of these conditions is this: that the cementing love of the two should have a well-defined channel of its own, not open to interference from any bordering affection. The paternal and the filial fondness may run parallel with other, and even with some much more vivid affections, and yet may maintain its entireness.

687. The ordinary occasions of domestic life do not fail to call forth the sympathies, just as the surface of a deep water is rippled by the showers and gusts that pass hourly across it. These sympathies, deepened more or less by moral habits, may, if we please, be taken as inclusive of all that is needed to bind together the members of a family. And, indeed, in many instances there *is nothing more;* how, then, can it be proved that there are in human nature any depths deeper than these? This can not be proved; for what we intend *more than this* is a simple element of consciousness, which has no constituents, and which, therefore, can admit of no verbal explication.

688. Moral considerations, religious motives also, and the exercise of the sympathies, are proper means for correcting whatever there may be of self-love amounting to selfishness. This sort of counteraction there may be room for even among the unselfish. But self-love or self-seeking, whether it tends toward selfishness or not, yields to a far more thorough process

of exclusion than this when an affection of the purer kind supervenes, and leaves no place for emotions of inferior quality.

689. A style of behavior and a course of conduct springing from an affection of this kind between father and daughter may, to the eye, be scarcely distinguishable from a style of behavior and a course of conduct which has its rise in reasons and motives of a very different order, namely, from a sense of duty, and from a conscientious regard to the fifth commandment. Filial duty, when it is thus based upon piety, is always to be commended; nor shall it fail of its reward. But *this* species of affection and *this* order of behavior is wide of our subject; for what we are intending is a blending and welding in human nature which NATURE herself provides for, and which may or may not include the moral virtues.

690. It is under its purely *physical* aspect that we are now making inquiry concerning the structure and functions of the human mind as socially constituted. Now this structure includes and provides for the development of affections in the depths of which self-emotions are superseded, or are subjected to a process of entire sublimation.

691. The particular case we have adduced above has just this argumentative value, that it offers itself in a more distinct and a less ambiguous manner than some other cases; but with those whose own consciousness supplies them with parallel instances, this one will be accepted as proof enough of our doctrine concerning human nature. Grant it as true that MIND in man includes emotions and affections to which no

process of analysis, resting on the hypothesis of selfism, is applicable, and then we have the key to a world of facts in human history, private and public, which otherwise are wholly inexplicable.

692. It is not merely in the secluded world of the home affections, but it is also in the noisy world of common life, and it is on the conspicuous theatre of historic life, that we may find, if not thousands of instances, yet tens of instances of great actions, patient endeavors, immolations, silent heroisms, in explication of which we must either frankly accept a deep-going theory of human nature, or, if we will not do so, then we must be content cynically to shrug the shoulders, and bring our speculations to a close in such terms as these: Surely human nature, such as it displays itself in some men and women, is a most unaccountable affair; for myself, I am no hero, and shall never act the martyr; nor do I profess to understand any sort of behavior which a reasonable man can never make intelligible to himself *as related to himself*."

693. The World of Mind, regarded physically, exhibits a process ordained of Nature, the intention of which is to raise upon the elements of the individual life the broad and multiform superstructure of the social life, and to give this foundation an almost unfathomable depth.

694. The order of Nature in pursuit of this end is this, as we have in part already traced it—personal consciousness, with its well-defined feeling of individuality, is promoted by that early interaction of the active and passive rudiments of Mind of which we have spoken (343–349, 364). The varying incidents of com-

mon life, with its alternations of good and ill, give a still more decisive form to the same concentrative habit, and serve to build up the individual man. Every day's intercourse with others has the same effect: motives of reserve, even toward the most intimate among these, strengthens and consolidates the munition within which the individual plants himself and holds his own.

695. This process of individualization is a necessary preparation for sustaining the superstructure of the social emotions and affections. There must be a fixed reticence, and a seclusive and repellent feeling where there are to be social habitudes, and a binding together by the cement of deep-felt affections. Apart from this personal insulation—this conscious independence—this repulsion, men might, indeed, herd together as do gregarious animals, but they would not congregate or become cemented in families.

696. Inroads are soon made upon this seclusive feeling, *first* by the urgent wants and the conscious weaknesses of the individual, and *then* by his spontaneous sympathies toward others in their wants and sufferings. These emotions, which (except with inert and brute-like natures) are involuntary and instantaneous as well as powerful, open for themselves a passage into the citadel of the personal reserve: a breach is made in the wall, and the man becomes a social being.

697. When once the social element is quickened, then the emotions and affections that belong to it spread themselves out in all directions, and lay hold of whatever it may be around them to which they can attach their tendrils. While it is in the nature of selfishness to compact itself more and more every day,

it is in the nature of the social sympathies and affections to strengthen themselves continually by expansion and amplification, and by a softening, and a growth, and a striking of their roots deeper, and sending them further.

698. Whatever may be the requirements of virtue, they can only be such as are in conformity with the original structure of the human mind. We have already affirmed (216–221) that a consistent belief of the reality of a moral system demands the doctrine of the initiative causality of Mind—a doctrine to be held in the most absolute and unexceptive sense. What we have now to affirm is this, that VIRTUE, if it is to be a reality, and is to be in harmony with the structure of the human mind, must assume the *physical fact* that the social sympathies and affections in man are *direct emanations*, and that when they are genuine, or so far as they *are* genuine, they include no reflective or reverberative reaction upon self—no calculations of consequences affecting self. The sympathies and the affections, so far as they are *true*, are also *pure* rudiments upon which Virtue rests its requirements, or, as we might say, they are elements which Virtue *finds*, and which it takes up and assimilates.

699. Frequent and grievous have ever been the complaints of the apathy and the selfishness of mankind. But what is the interpretation which we should put upon these petulant moanings (and for which, in fact, there may be ground enough)? It is this: That whereas in every human heart there is some consciousness of that which belongs to human nature by its very structure, namely, pure sympathies and unselfish

affections, we do not always meet them when and where they are needed. If, in fact, there were no such deep-seated and instinctive belief, never would any complaint of this kind have been uttered.

700. We all echo these complaints as often as occasions arise, and it is scarcely any number of disappointments that avail to rob us of that inbred belief whence they take their rise. The misanthrope is the dissatisfied man who has often and often quarreled with himself for retaining it so long: he is ever and again calling himself a fool for his own obstination in continuing to think well of his fellows.

701. To save us from these recurrent disappointments, and effectively to drive us off from the ground where they spring up, the philosopher—the strict analyst of human nature—proffers his services. He assures us that we have only ourselves to blame for listening to fine verbiage about generosity and disinterestedness, and about honest philanthropy. The honest man, and the only one, he says, is he who, while he makes open profession of the purest selfishness, takes care that his language and his conduct shall always be in perfect accordance on this ground. The philosopher assures us—he has done so in every age, and he is doing it now—that, having submitted human motives to a process of exact analysis, he finds nothing among them that does not turn out to be a form or a product of self-love—nothing that is not reducible to the reflex motive of a desire for our own individual well-being.

702. The philosopher of this school has never failed to find among his contemporaries those who become

his coadjutors as brilliant popular writers, and who, in sparkling style, go about to prove that all men are, in fact, as frivolous or as base as the basest and the most frivolous of men know themselves to be. Popular fiction usually takes this level ground, and charges itself with the task of proving that human nature is a flimsy manufacturer of cardboard, gold leaf, paint, and varnish.

703. This philosophy and its attendant satire has held the same language in every age. The cream of both may be found in so small a book as that containing the moral maxims of La Rochefoucauld. These "Moral Maxims" might be made use of as a test of the quality of minds. By the natively base and the debauched they will be swallowed as a sweet morsel, feeding self-complacency where self-respect has never been. As to souls of a middle and better order, and who yet cling to what is fair and good, such will peruse this collection with a melancholy curiosity, and will tremble as they read, lest while they are compelled to admit the exactness and precision of the writer's dissections, they should, in reaching the end, find themselves stripped of whatever hitherto has served to reconcile them to existence, and has given hopefulness to their better purposes. As to vigorous and healthfully constituted minds, such will quickly throw these sophisms from them in contempt, and will think it enough to recall the writer's position and training, whose misfortune it was to have seen nothing of humanity but what he conversed with in the pestilential stews of the most corrupt of profligate courts.

704. Books of this class, whether philosophic or popular, are, in fact, a homage rendered to virtue.

There would be no mockery in a world in which there was no reality; there would be no satire if there were no goodness and truth. There would have been no negative philosophies if there were not in human nature substance and a ground on which a positive morality may be reared.

705. It is a safe principle, already affirmed, and to which we might attribute the authority of an axiom in Mental Philosophy, that when A BELIEF, which is spontaneous and universal, works in with the functions of the intellectual and moral life, and promotes their harmonious interaction, such a belief is not an illusion, but a reality; it is a truth.

706. If this rule be valid, in no case is its application of more serious consequence than in the bearing it takes upon this question of the genuineness of the benign social emotions and affections. Let the doctrine be zealously promulgated in philosophic writings and in popular literature that nothing is real but self-love—selfishness; and then, so far as this teaching is listened to, it will speedily make men as cold and selfish as it tells them that they are. This is a result that has been realized often in the history of highly sophisticated communities; it is a process that is always going on where the literary taste of a people has become vitiated by an abundance of frivolous and sarcastic fiction. On the contrary, let domestic training and public instruction confidently assume and firmly maintain the belief of the genuineness—the simplicity—the *reality* of those sympathies which prompt us to aid each other in suffering, and of those profound affections which cement the family relationships, and which

give warmth and intensity to the endearments of home —let children and youths be thus taught, and the reality which we affirm will actually come into being, and flourish around us, and will show its presence in the genial happiness it diffuses. BELIEVE IN LOVE, and you will love and be loved.

XIX.

ANTAGONISTIC EMOTIONS OF THE SOCIAL SYSTEM.

707. THE intelligible distinction between Anatomy and Morbid Anatomy, between Animal Physiology and Nosology, is always regarded by writers in those departments of science. Whatever belongs to the original structure of animal life, and which is essential to its functions, may easily be described and set forth apart from those irregular forms and those disturbed modes of action which take place in consequence either of violence or of disease, and with which the surgeon and the physician have to do.

708. A distinction quite of the same kind, and which is as easily observed, should always be kept in view in relation to our present subject. Whatever manifestly belongs to the structure of the Mind, and which we can not well imagine to be separable from it, at least while it is conjoined with animal organization, we claim as our proper province in this elementary book. Therefore it is that, after speaking of the Social Emotions, and these chiefly in their benign aspect, we should say something—or something more

than has been said—of those antagonistic emotions which act as repellent forces within the same system. The leading emotion of this class—Anger—we have already referred to as necessary to the defense of animal life (608), coming in, as it does, to sustain and to invigorate the instinct of self-preservation.

709. But on this ground we advance only a few steps before we touch our limit as above mentioned. The antagonistic or protective emotions, indispensable as they are to the conservation of a scheme of life such as that of this world, are *proper* to it only while they preserve their characteristic evanescence; the access of the intensity of feeling should be transient. When these emotions become congested, when they lengthen themselves out and survive the immediate occasion, and when, in doing so, they pass into the form of affections, dispositions, tempers, then they have gone beyond our range, and we assign the treatment of them to the moralist and the religious teacher.

710. Defensive anger, if it be cherished and conserved, soon ceases to be *Anger*, for it undergoes a speedy transmutation, and, according to the temperament and the animal tendencies of the man, it becomes chronical and malignant; in the forms of hatred, envy, jealousy, it wraps itself around in purposes of revenge. Sometimes it sinks into domestic petulance; sometimes it flames out and sets the wide world on fire in modes of ambitious destructiveness. Defensive anger, thus transmuted and become a *temper*, when it combines itself with an inordinate self-esteem, marks itself upon the countenance and demeanor as a sullen pride. Sullen pride, when it has chanced to incase a too

sensitive nature, and has met injustice and ingratitude, fixes itself upon the unhappy being whom we shun as the misanthrope.

711. But we may well take leave to stand aloof from all subjects of this class: they implicate many inquiries which are *physiological* rather than intellectual; and, more than this, they are not to be parted off from considerations which have a moral and religious aspect. We should not merely *err* in a scientific sense, but should give countenance to the most serious misconceptions as to the grounds of virtue and piety if we should take in hand the task of digesting a philosophy of evil dispositions and bad tempers on any principles that are merely physical.

712. Some ennobling emotions which are of the highest utility in relation to the welfare and progress of nations must find a place in this section, although it is only in an indirect sense that they can be designated as *antagonistic*. The desire of approbation, and ambition, and the love of power, and the thirst for posthumous fame—these generous impulses, and many varieties of them, connect the individual man with his fellows; they give rise to feelings which are reciprocal, and the sentiments which thence take their rise are generally of a benign complexion. Why, then, do we class them with such as are merely repellent?

713. The reason of such an assortment is this: that whereas the purely social affections—love and sympathy, and the domestic instincts—are wholly of a cementing quality, those which we have now to speak of do not take effect *cohesively* until after they have acted as repellent forces. The germ of these emotions

is an enlarged self-love, or it may better be called a more intense individualism. Minds of this order, and it is often the choicest minds that are peculiarly alive to the love of approbation, to emulation, to ambition, and the love of power, are, more than others, self-regardful, and yet they may not be, in an evil sense, *selfish.*

714. Not only is the germ of these emotions repellent, but, as they have a peculiar aptitude to run into an exaggerated form, they easily become, in a vicious sense, anti-social. From out of these feelings dispositions too often grow which choke whatever is benevolent, generous, and disinterested.

715. Hence it has happened that moralists of a certain class, in their anxiety to secure the integrity of virtue, have not scrupled to denounce these powerful impulses as altogether and in every sense evil, and they have sternly demanded their excision to the very roots.

716. It is easy to show that this demand, springing as it does from an overdone zeal, and instigated by a sophisticated morality, is such that, if it were allowed to take its course, instead of eradicating these instinctive emotions, it would give us, in the place of an open-faced ambition, confessed and recognized as noble and praiseworthy, the changeful colors of a profoundly selfish hypocrisy.

717. What are the facts? The thirst of applause, the desire of fame, the love of power—these, and the many kindred feelings which are characteristic of a class of minds—the few, are, in truth the correlatives of those involuntary emotions which impel all men to

admire whatever in work, in achievement, in conduct, is indeed worthy of admiration—whatever is pre-eminently good, or beautiful, or beneficial. Severe moralists, therefore, who would apply lunar caustic to ambition and to the love of praise, should begin their work by showing the multitude how they may go about to repress the irresistible impulse to admire, and to say aloud that they admire what is great—noble; whatever genius has imagined and patient assiduity has realized on the field of art or on the stage of public life.

718. Should we not think it a preposterous endeavor to quash admiration in the breasts of men and to put it to silence? Yet so long as all men feel what they can not but feel, and so long as, with a frank and generous candor, they give utterance to these feelings, then what sort of self-denial is it which the moralist imposes upon the gifted man upon whom the grateful eyes of thousands of his fellows are turned? Is it a possible act? If it be said, "Give glory to God," we heartily assent to this religious injunction; but the man will have nothing to give until *after* he has felt that it *is glory* which has come into his keeping, and which he may now lay upon the altar.

719. But if, indeed, we could quash admiration, or if we could interdict the utterance of it, or if we could stop the ears of those who labor to win it, what will then become of the social system? To whom are communities to look for promoting their advancement? How shall the minds of the many be fed, taught, lifted from the savage and the sensual condition? Crude motives, either of urgent necessity or of mere *pay*, will

not give us those very things which are the most needed if MIND is to be *mind*, and if the life of thought and feeling is to prevail over the brute life of appetite and instinct. All that is best in every kind, all that is rare, and whatever it is among the products of human labor which we gaze upon with delight and wonder—all these fruits of mind—all must be foregone, must be forgotten, and must never again be sought for or desired, if we may not allow the desire of fame and ambition, and the love of power, to take the place that is due to them in our morality.

720. Among these impulses, the one which would be singled out as the most open to reprehension in the view of the severe moralist is the love of power, or the ambition to occupy the place of command in the government of nations. But if we denounce the love of power as essentially vicious, and if such denunciations come to be generally accepted as proper, then what must follow is this—that seats of power will be seized upon by men who avowedly are destitute of virtue, and whose only law is self-love. This is certain, that nations must be governed—the many by the few. We ought, therefore, to invite to the competition the best and the highest spirits.

721. From another quarter, ambition and the love of power sometimes receive an interpretation which can not fail to vitiate them, and so to damage the commonwealth. Writers of a certain school, in professing to analyze these impulses in the strictest manner, declare that they are modes only of that omnipresent selfism which prompts every man to secure for himself the greatest possible amount of the substan-

tial good things of life. Inasmuch as the holder of power may easily accumulate wealth, and so may largely command the services of other men, power, it is said, comes to be an object of desire, coveted alike by all.

722. Thus to resolve ambition into the lowest species of self-love, and thus to *materialize* it, is infallibly to bring about a result nearly the same as that which attends the mistaken denunciations of the moralist above referred to. If ambition be only a disguised desire of sensuous enjoyments, then the strong and the wicked, and none else, will contend for sceptres: the wise and the noble, if, indeed, they could be persuaded to yield their better convictions to such doctrines, would stand aloof from the strife.

723. We should trace the love of power, or call it Ambition, to another source. In accordance with the guiding principle that is adhered to throughout this book, as we understand human nature in a more positive sense, so we boldly give it a more generous interpretation.

724. That which is of the very essence of Mind—that which is its primary rudiment, becomes the prominent distinction or individual characteristic of a few minds: sometimes in combination with the tranquil intellectual emotions (Section XII.), sometimes as related to the pursuits of common life, where the most ordinary motives take effect, and sometimes in alliance with those social emotions which bring the individual man into a position of tacit contrariety with his fellow-men, as above mentioned.

725. Ambition accomplished, the desire of power

achieved, command or influence over other men attained, the disposal of great affairs fully enjoyed—all this done, and then a mind of rare energy becomes a *sample mind*, and is in that very condition which is the most characteristic of its nature.

726. The accessories of power or its ostensible rewards—its glitter and its pomps, its luxurious table, its soft indulgences—all these things are of the surface only, and those must have gone but a little way into the depths of human nature who tell us that it is *for the sake* of its *bonbons* and its trinkets that great minds tread the arduous ascents of ambition. In the large meaning of the *Ego* of those noted words, *Ego et rex meus*, there might have been embraced the cardinal's feastings, and his retinue, and aught else of the sort which he relished and allowed; but the substance which they represent was a quality of the soul that belonged to the butcher's boy at Ipswich.

727. It is thus that an effective achievement of the painful, the dangerous, the patience-trying work of the world is provided for and is made sure. But how much of this enormous task would actually be undertaken, or, if undertaken, would ever be completed, if men set themselves to it at the impulse of no motives of deeper origin or of greater intensity than are those which impel the day-laborer to acquit himself of his day's labor? Scarcely a thousandth part of it, and that fraction poorly done.

728. As to the moralities of ambition or its immoralities, we have nothing to do with subjects of that class in this place. But there is nothing which the most severe teacher could allege in the way of repre-

hension or of caution which could avail to dislodge from its place, in the economy of the social system, this principal element of the world of mind.

729. For carrying forward the various purposes, and for securing all the interests of a community that is advanced in civilization, there is very much work to be done, for the doing of which no provision is made, unless we include that set of motives, affecting *a few* minds, of which now we are speaking.

730. The rough work of the world is sure to be done sufficiently well at the prompting of those motives which impel every man to do the best he can for himself. These universal motives take effect alike upon the lad who sweeps a crossing and upon an under secretary of state. Another class of the common interests of a community will be cared for and made good by those who, while laboring, in fact, for their fellow-men, are thinking only of their individual tastes in doing so. It is thus that much of the intellectual work of a people is prosecuted in the fields of philosophy, poetry, and the fine arts.

731. But beyond these labors, thus provided for, there is very much to be done which will not be done unless we can engage in the service of the commonwealth a class of minds governed by motives that are neither ordinary nor *calculating*, in the vulgar sense of that term. There is need of men whose motives, consolidated into *habits* and *dispositions*, will carry them through services from which the selfish, and the sordid, and the prudent too, will draw back. We need the services of men whose biographies are hereafter to come into the hands of the historian.

732. But men such as these will never be forthcoming, if, on the one hand, ambition, and the thirst of fame, and the love of power, be denounced as essentially vicious, or if, on the other hand, these emotions and passions are so spoken of in the literature of a people as to vilify and vulgarize them, and to put a degrading interpretation upon any course of action which springs from them.

733. Public services are performed efficiently by none but those who have wittingly pledged life and fortune from the very first. These achievements and labors are always of a kind that imperil life and health, and that invade or quite preclude domestic felicity; they are to be carried forward under extreme discouragements; often in the face of rancorous and unscrupulous opposition; and they may bring upon a man calumnies which it is never permitted him to refute. At the end of his course, perhaps, he stands "begging a little earth to cover him," uncertain whether the men of the next age shall care to hear his cause anew, and shall reverse the unrighteous sentence of his contemporaries.

734. Yet, unless services of this order are freely undertaken, and are well and nobly achieved, the world must come to a stand; or, if not, public functions of every kind must be abandoned to those whose baseness will utterly vitiate the social mass throughout all ranks.

735. What we now affirm is just this—that in the structure and the functions of the social system there is needed, and there is actually found, an impulse, taking effect upon a few minds, which will carry the man

forward far in advance of every other motive, and far in advance of a prudent regard to his individual welfare. This we allege to be the very characteristic of genuine ambition and of the true desire of power. Spurious ambition and the vulgar lust of power, if ever they *seem* to be self-sacrificing, are so only at the instigation of conventional feelings, the fear of disgrace, or a blind compliance with the rules and usages of professional behavior.

736. But has not this element of human nature a further significance? Does it not point forward to another state of things? He who throws himself into public services not merely at the risk, but at the cost of all the things of earth, does he not proclaim a truth which speaks of those things that are not of earth? To attempt an answer of these suggestive questions would carry us quite beyond the range of our present task.

737. We return, then, to the things of earth, and in doing so should note this property of a genuine and self-immolating ambition: that as it is open to a *something beyond*—to a something in the remote future which is undefined, and as it has a consciousness toward the infinite, it readily coalesces with every species of advancement and improvement, in moral principles and in feeling, which is going on around it. To this genuine and non-selfish ambition there belongs a natural buoyancy; it has an upward and a forward look; it asks to be numbered with the imponderable elements of the mundane system. Where, on any side, there is the most vitality, where there is progress, where there is any commendable enterprise in hand, where there is

that which is true, that which is honest, that which is just, that which is pure, that which is lovely, that which is of good report—wherever, among the things of earth, there may be found any virtue and any praise, thitherward will a genuine ambition and an instinctive love of power move on, and along with such things will it push forward; and it will do so in front of all perils, and at any cost, and with a seraph-like determination to reach the goal.

XX.

EMOTIONS AND TASTES RELATED TO THE MODULATIONS OF SOUND.

738. Upon the field of Mental Philosophy the same mystery confronts us anew almost at every turn, seeming as if it were about to reveal itself, and yet again mocking our endeavors to resolve it. The interaction of Mind and Matter within the animal organization sometimes nears the surface, and yet it is there as inscrutable as when deeply seated.

739. An instance of this sort presents itself when we inquire concerning the power of modulated sounds, whether as melody or harmony, to affect the mind. This power extends not merely to the production of pleasurable organic sensations, but, far more than this, to move the very soul, and to awaken every sentiment and to stir every passion of which it is susceptible. This power conforms itself to conditions which distinguish it, in the most decisive manner, from every other kind of influence affecting the senses. Musical sounds

so take hold of the mind as nothing else takes hold of it.

740. On this ground we are invited to step forward, step by step, from that which is mechanical and mathematical, to that which, in the loftiest sense, is emotional; nevertheless, the precise point at which we pass the border from the world of Matter to the world of Mind escapes our keenest search.

741. Those articulate modulations of the human voice which are made available for the purposes of speech are not in themselves pleasurable; they are not *organically* pleasurable, although they may become so by aid of the associated ideas and feelings which they awaken. If we include all the tones that are employed in conveying our meaning by *emphasis* as well as words, the variations of which the voice is capable are innumerable; but unless they are subjected to the rules of rhythm and cadence, and so become *musical*, they do nothing more than convey the mind of the speaker to the mind of the hearer.

742. Whether a single note, either of the human voice or of a musical instrument, prolonged, is organically pleasurable, is a question which we need not here discuss, but may assume the affirmative. It is certain (and this is all that concerns us just now) that successive sounds and simultaneous sounds, having an exact mathematical relation to each other in tone, are pleasure-giving in a high degree. Endlessly varied combinations of these related sounds come within the compass of musical composition, but the element is the same in all; two or more sounds bear to each other a definite relation which is measurable mechanically,

and which, in the most absolute sense, is computable mathematically.

743. That which, in each instant of time, falls upon the tympanum when we listen to music, is a combination of vibrations; and of the precise relation of the constituents of this commingled sound the human ear is cognizant with infallible exactness.

744. The laws of acoustics are subject to rigid mathematical treatment, and the laws of musical relation are also mathematically known; but these laws carry us no farther in explication of the power of music over the feelings and passions than to the surface of the tympanum; all beyond, or farther in than this, is a *terra incognita*, until we come into the Mind itself, and confer with it in its own soul-fraught manner. From the exterior coating of the tympanum the next step brings us to a soft mass of non-vibratory nervous substance, attenuated in its microscopic filaments. Here, then, we must take leave of what is measurable and mechanical, for we have set foot upon the threshold of animal organization. We have passed from the department of one science, the laws of sound, to the department of another science, the laws of animal organization; and yet this latter science has scarcely offered us its aid, when it declares its inability to give us any further guidance. We have already gone over from the region of a nervous expansion, and have reached the adytum of the Percipient Mind, and this mind is now, perhaps, in a state of consciousness so intense as to be quite vanquished by its emotions.

745. The Mind percipient of sound is, with exquisite exactness, cognizant not only of all *differences* of

sound, but of the measurable *relations* of sound; and in respect of these it is intensely sensitive, both pleasurably and painfully, toward them, as *true* or *not true*, mathematically; and then, beyond this, it is alive throughout the wide circuit of its emotional nature up from the gentlest sentiments or sympathies to the stormiest passions—to the *suggestive meaning* of melody and of harmony. All that is tender in feeling, and all that is tumultuous in passion, all that attempers human nature by soothing excitements, and all that maddens it, is at the command of Music.

746. Thus it is, then, that, within the compass of a paragraph, we name, so far as it is known to us, all that fills the space between the outer world of mathematical relations and the inner world of refined feeling, and of pure sentiment and of impetuous emotion; but in doing so we fail in our endeavor to lay the hand upon some midway links of the chain. Our part, then, is to accept this, our inability to reveal the unknown, and to follow such tracks of thought as are open to us. Now it appears that, on this ground, such things as the following are open to us:

747. It is in the sense of Hearing *first*, and next in order, as we shall have occasion to show, in the sense of Sight, that the union of Mind with the Animal organization, or the Corporeal condition of Mind, yields an advantage *on the side of Mind* as opposed to animal tendencies. This is a fact which deserves attention.

748. Not merely for enjoyment sake, but for securing the animal conservation, the senses of Smell, Taste, and Touch are the medium, severally, of a pleasurable consciousness. But in each instance, as to *these* senses,

the enjoyment is of a kind which lowers rather than raises the moral being; it is such as needs to be admitted with caution, and should presently be dismissed: just so far as it rules the man, it degrades him.

749. The pleasurable sensations of hearing and of sight, although they take their rise, like the others, in the animal organization, move forward in a contrary direction; the tendency of these organic pleasures is from the body to the soul; the "arrow-head" which indicates the course of the movement is pointed upward, not downward. It may be true that the gratifications of these two senses are sometimes, or are often, abused; but, in the order of nature, they lead onward from matter to Mind, they point from symbols to the things symbolized; they move forward from the less worthy to the more worthy; from that which debases to that which elevates, and purifies, and ennobles human nature.

750. We take up *first* of these two the pleasurable sensations which enter by the auditory nerve, assumed to be, as we have just now said, pleasurable *organically*, and not becoming so by aid of indirect associations; and it is such sounds only as are musical that are organically pleasing. Musical sounds, whether they proceed from a wire or cord in tension, or from an elastic metallic plate, or a bell, or from the human voice, or the throat of birds, observe this law: that the vibrations transmitted, in whatever way, from their source to the ear, are definite as to the number that take place in a given time—say a second; and that the exact number of vibrations that constitute a note has a determinate and invariable relationship of agreement with that

determinate number of vibrations which constitute any other note. A chord is this agreement; a discord is a variation from it. A simple mechanical apparatus gives us the actual number of vibrations that are proper to each note, and shows the mathematical relation of note to note, and to half notes.

751. As to the truth of this relationship, and our sense of it, and the contrary, in any instance when musical sounds fall on the ear, the same, nearly, may be said of it as we say of those proprieties of behavior which distinguish well-bred persons—conformity thereto gives us little pleasure; but any instance of *nonconformity* in those around us is positively, and in a high degree, painful. The mere sense of *truth* in musical sounds may indeed be agreeable, and especially it is so if it be thought of in comparison with *discords;* but we must look further for the cause of that organic enjoyment, intense as it is, upon which, as a *substratum*, the pleasurable quality of music sustains itself.

752. It is not the nerve behind the tympanum—it is the Mind that is conscious of sound; it is not the retina, but the Mind that is conscious of light. So much as this must be taken for certain as our *datum* in any kind of reasoning concerning the correspondence of Mind and matter within the animal organization. This is not *demonstrably* true, because nothing in this department of science can be demonstrated. The best we can do is, with two or more suppositions in view, to choose the one which consists the best with the mass of facts that should find in it an explication.

753. Mind, conscious as it is of sounds, and conscious of the rate of vibration in sounds, and of all cor-

respondences and disagreements in these rates, proves itself to possess a perfect mathematical sense both as to time and number. This perception of time and number gives this peculiar evidence of its constancy and of its universality, namely, that whereas, in the other senses—taste, smell, touch, and even sight—the perceptions and judgments of individual persons differ in extreme degrees, there is an almost absolute agreement among all who possess the musical sense as to the truth or falseness of musical relations of sound. A chord is instantly assented to as such by any number of persons who are musical by constitution and training. The instances of dissent from such judgments are exceedingly rare, if they occur at all. There are many who fail in the attempt to pitch their own voice correctly, and there are also very many whose perceptions of sound are obtuse or confused; but among those whose ears are musically sensitive there is unanimity of judgment as to chords and discords.

754. What, then, is the warrantable inference on this ground? It seems to be this: that MIND, or let us say Mind in its corporeal lodgment, is subjected to rhythmical conditions, or to the laws of Number and Time. But this conformity can be none, unless it be absolute and infinitesimal. Man and the singing-bird alike confess their relationship to the same laws of musical accordance.

755. A single musical note we assume to be organically pleasure-giving; but the complication of these organic sensations, like every kind of complication, imparts intensity to them, and the sense of pleasure is rapidly enhanced at every change in the movement.

756. Yet another step is needed to give consistency to our hypothesis; or let us call it a mere conjecture, and it is this: that, as to the emotions—the gentle sensibilities and the passions—each has its specific rhythmical law, and each its key-note. It is, as we may imagine, at the point where the mysterious interaction of Mind and body takes place that this rhythm has its sphere of influence: it is a latent law, making itself known only in its results.

757. That, therefore, which we imagine to take place when Music kindles an emotion, or arouses the passions, is this—that a coincidence of the one rhythm with the other has occurred. A momentary stimulus thus given to any class of feelings will be enough; that luxurious sense of enjoyment with which it is the prerogative of music to fill the soul goes over to enhance the feeling which the first few sounds have excited, and thenceforward the intensity of that feeling is directly as the pleasure.

758. We turn from conjectures, probable or not, and look to unquestionable facts. It is not difficult to conceive of a scheme of existence which should in every respect be the same as that of this actual world, only not inclusive of any musical consciousness; vibrating bodies giving forth no sweet sounds, the human voice capable of none but non-musical articulations, and, in the human soul, no corresponding musical faculty or feeling.

759. It does not appear that the world, such as it is, might not go on well enough under such a privation. So far as we can see, Music is, as to the animal organization, and as to the social system, and as to

any palpable utility, a *superfluity*. Music, we must grant it, has been thrown in upon the human system; it is a free grace, and a boon not demandable on any grounds of necessity; it might have been withheld. If it had been withheld, we should have been conscious of no destitution. "As to this music, of which you say that it is the choicest luxury of an upper sphere, and the ineffable delight of immortals, we want it not on earth; nay, such as you describe it to us, it would ill suit us; it would put us out of humor with our hard lot: keep it, therefore, to yourselves."

760. So we might have thought and so spoken. And, in fact, have we not often felt, while the powers of harmony were ruling all souls in its own sovereign manner, that this power is of foreign origin—that it has come down among us—that it sojourns only—that after it has displayed itself for an hour, it will wing itself away to a more gladsome world?

761. We may coldly condemn any such mode of feeling as unwarrantable, or fanciful, or extravagant, and yet it returns upon us, whether we invite or reject it. Music is a power far more than earth could pretend to; it is a large, free gift, and it has a remote meaning, and it asks the ear of man as a sample of a state of being with the conditions of which it shall always and altogether consist.

XXI.

EMOTIONS AND TASTES RELATED TO THE OBJECTS OF SIGHT.

762. It is, as we have just now said (747), in the sense of Hearing *first*, and in the sense of Sight *next*, and it is in these two, and scarcely at all in the other three (or four), that we find the pleasurable consciousness which attends a certain class of their perceptions to have an upward tendency; that is to say, to exert an influence which is intellectual and moral more than sensual or merely animal.

763. We recapitulate thus far. The power of the human voice to utter articulate sounds is a function that is needed in the mechanism of the human system. Destitute of this power, the machinery of the intellectual and social world could not go on—could not develop itself. But the power of these same organs to give forth *musical* sounds, and the discriminate consciousness of such sounds in the ear, are quite supplementary to this machinery, for its functions and purposes might be fulfilled, music apart, and on the supposition that the consciousness of it had not been bestowed. In this sense, then, it is a superfluity and a grace.

764. In analogy with this are those conditions of the material world as to its exterior, and those corresponding Tastes and Emotions of the human mind with

which we have now to do. These conditions are *supplementary* in relation to the structure and functions of organized bodies, and also of the unorganized masses of the world; and, in like manner, the tastes and feelings to which these conditions are related are supplementary to the Mind. Human nature might have wanted them without being conscious of any want.

765. The same analogy holds good, also, in the next step. Those pleasurable tastes and emotions which take their rise from the exterior and visible conditions of the material world have an upward tendency toward that which is intellectual, not sensual, and toward that which is moral, not degrading.

766. Thus it is that, on one hand, the sense of Melody and Harmony, and, on the other hand, the sense of Beauty, take their position in the scheme of human existence as intermediate between sense and sentiment—between the organization and the soul—between that which is the lowest among the functions of life and that which is the loftiest. These two species of consciousness may well be regarded as redeeming energies in the human system.

767. We may look abroad upon the material world, animate and inanimate, with two entirely dissimilar intentions; for we may look at every thing as *Structure* and *Function*, or we may look at the same objects as a blended manifestation of Form and of Color. Under the *first* of these aspects it is the *interior* chiefly that we are concerned with; in the *second* it is the *exterior* exclusively. As to the *first*, it is REASON that is called into exercise; as to the *second*, it is a SENSE for which we want a comprehensive and alto-

gether fit term: we call it the sense of Beauty, or the sense of the beautiful and the sublime.

768. Among all the sounds that fall upon the ear, it is, as we have said, one class only that is organically pleasurable, namely, musical sounds; but among the infinitely various impressions that fall upon the visual organ there are impressions of several distinct classes that are in themselves pleasurable. This at least must be affirmed, that these impressions differ so widely in kind that it is better to consider them apart than as modes only of one species.

769. Yet it is true that, in the intensely pleasurable consciousness of Beauty as it is spread upon the surface of the material world, there is ordinarily little thought of its several constituents. In this luxury of the sense and of the soul there is an emotion, the tendency of which is to blend and to commingle rather than to distinguish and to separate the elements of enjoyment. It is when the Beauty of the visible world comes to be regarded as an object of Art, and when it is to be reproduced or imitated, that we are led—necessarily so—to make distinctions, and to give separate and careful attention to each ingredient in the composite enjoyment. Some such analytic process is needed also when, as now, we intend to consider the subject before us in relation to its elements in a scientific sense. But for a moment we may look at it apart from analysis, and without any discriminative carefulness.

770. The Beauty of the visible world and its sublimity—for we must not now divide elements that are more often commingled than disjoined—this Beauty is

such that, if a man be exempt from the pressure of common wants, and if he be free to surrender himself to the life of intelligence, and also if he be of that temperament which relates him to such objects, then, and with these conditions supposed, the decorated aspect of the world quite fills the faculties which it stimulates: it is enough of enjoyment; more than this is not thought of or cared for. No other occupation than that of contemplating it is desired; no sense of satiety or weariness is engendered in this continuous contemplation.

771. It need scarcely be said that, in thus speaking, we put out of view, *for the moment*, that from which no human being may, in fact, insulate himself, namely, the requirements of his moral and spiritual nature. No man is free to hold himself clear of social and religious obligations. These duly allowed for and supposed, then it may be affirmed that the visible world and the human soul, with its circle of Emotions and of Tastes, are complements the one of the other. Throughout a large extent of its circle of faculties, the human soul has no vitality: it is not, or it is latent, until it receives its spring from its apprehension of the beauty which surrounds it in the visible world.

772. Thus it is, then, that, if the Reason be paramount in the individual temperament (419, *et seq.*), then the man finds his sphere in making himself conversant with the structure and functions of the material system; the world, when *thus* regarded, is the complement of the Human Reason. But if it be the Emotional nature and the Tastes that are paramount, then it is the *Exterior* of this same world that en-

gages the faculties and that supplies them with their aliment.

773. We have to seek for the rudiments of that composite pleasure which we derive from the spectacle of the world, regarded in its visible properties.

774. I suppose myself to be in an apartment or hall illuminated by a diffused light. Before me there is a slab of white marble. Unless the sight be weak and diseased, it is always true that "it is a pleasant thing for the eye to behold the light;" yet this is a pleasure of an undefined sort. But now upon the marble slab let there be thrown, by a prism, or by a sunbeam passing through colored glass, one of the three constituents of the solar light—the Yellow, or the Red, or the Blue. Let this two-inch square of color have an unsullied prismatic purity, and all the brilliance that can be given it, so as not to oppress the sight. This colored surface not merely attracts the eye, as might happen from the appearance of a dingy spot or stain upon the marble, nor as might happen from the falling of a beam of direct light on the same area. I gaze at this pure resplendent yellow, or red, or blue with a vivid pleasure. Unless there be an excess of radiation from the colored surface, the eye feeds upon the brilliant color—feasts upon it. We say the *eye;* but rather let us say the MIND, alive toward color, not merely notes it as distinguishable from *whiteness*, but imbibes it with a satisfaction, as if it were the aliment of an appetite. This yellow, or red, or blue—pure, spotless, and resplendent—if it were then seen for the first time, would kindle a faculty; it would impart a new element of enjoyment to consciousness.

775. But now upon this same slab there is next thrown the three primary colors, each mingling with its neighbor, as seen in the prismatic spectrum. A *new* gratification, in this case, presents itself; for it is not merely three organic satisfactions for one, but these patches of color—the primaries, and their mixtures—the orange, the violet, the purple, the green—have a fixed relation each to the others, which the organ recognizes as true and as grateful, because it is *a fixed relation.* Take each of the secondary colors apart, and it exerts its own power over the sensuous faculty; but taking these secondary colors in groups with certain contrasts obtained by aid of the primary colors, and then new gratifications of an organic kind are the result.

776. Close by the side of the prismatic spectrum, within which the colors are so commingled as to preserve the purity of each, and a certain relationship among them, place a sheet of paper upon which stains, or any *non-related* mixtures of the same elements are spread out. Then appeal to any healthy eye to make its choice between the one surface and the other. Which of the two is it that the sight rests upon with satisfaction? Or let the adjudicator be an infant whose perceptions are unsophisticated. On this ground an analogy presents itself between sounds and colors which should be adverted to in passing, although we should not too far insist upon it: it is a *suggestive analogy*, not a scientific generalization.

777. Among the infinite diversities of sounds, it is vibratory or musical sounds only that are organically pleasurable, and these, if they be synchronous or close-

ly consecutive, must be inter-related in a certain perfectly exact manner, sound to sound, otherwise they give pain, not pleasure. Now as to colors, it is not the promiscuous or the accidental commingling of them, such as is presented on the dull surfaces of modern buildings, roadways, or overcast skies, that awakens and engages the visual sense; the elements of light must be presented in their *purity*, and they must be inter-related in a specific manner. Pure colors, commingled in certain proportions, and placed in a certain juxtaposition, are gazed upon with a vivid organic gratification. Musical (vibratory) sounds in their purity, and if related to each other in fixed proportions, are listened to with intense organic pleasure. In these facts there is, to say the least, the indication of an inner truth, resolvable probably into the mathematical conditions of Mind. But the pursuit of so recondite a subject would not consist with our present purpose.

778. The pure elementary colors, and also the secondary commixtures of them, are presented in many of the surfaces of the material system, organized and unorganized, and the eye (the eye that is gifted for color) recognizes them with pleasure; as, for example, in the cloudless vault of heaven, in the splendors of sunrise and sunset, in the precious stones—the amethyst, the emerald, the ruby, the sapphire, the topaz; in the vestiture of some animals, especially of birds and insects, and in shells; and not least, in the delicious gayeties of the flower-garden.

779. But besides these primary and these secondary colors, a large proportion of the surfaces that meet the eye in nature, and upon which the artistic eye rests

with a keen delight, are those comminglings of the secondary colors, forming the tertiary, which are technically called *tints*. These tints, when they nearly approach each other, and when they are set off or relieved by brilliant spots of the primary colors, fully satisfy, but never satiate an eye that is alive to them. The instances are such as these: the remote distances of a mountainous country; hill sides, changefully illuminated and cloud-shaded; the surfaces of rocks, time-worn, and partially coated with lichens—gray, greenish, slaty; the exterior walls of ancient buildings; the massive southern frontage of woods or plantations, in which all varieties of foliage court the sun; and these at the time—so brief—when the earliest autumnal decay has shown itself. As to the decorated animal species—birds, butterflies, moths, crustacea—it is seldom in these instances the *tints* or tertiary colors, but more often the primary and the secondary, that Nature has brought upon her palette.

780. Those groupings of deep and rich colors of which ART makes her boast, and which spread a splendor upon historic subjects, these are seldom—scarcely ever presented on the tablet of Nature. They are the devices and the resources of Art; and yet, although they are *devices*, it is not the less true that they draw their reason from principles, and they please us in Art only because, by its structure, the mind, as to its visual faculty, is alive to these harmonies and these contrasts, and recognizes them as true. Music is Art, not Nature; but it is Art conformed with the most severe exactitude to the laws of mind in regard to its consciousness toward sound.

781. ART and its principles are not our subject. If now we return to the aspects of Nature so far as relates to the harmonies of color, then we have to give its due place to that main condition of beauty in landscape, atmospheric intervention, or its semi-opacity and its diffusive power—in a word, all that is comprehended in the technical phrase aërial perspective. If we would know how much of our English feeling of the charms of landscape we owe to this intervention, we should take our summer's tour in countries such as Palestine, where it is at its *minimum*, and where hills of commonplace outline, far and near, look like the painted plaster of Paris model of a country, all equally distinct, and all hard in outline.

782. It is the semi-transparency of the atmosphere, carrying its variable burden of uncombined moisture, its mists and its meteorologic accidents, that suggests to Art something beyond the mere imitation of colors and of forms, and that imparts to landscape its community of feeling with poetry. By the breaking down of secondary colors into tints, by the blending, almost into one, of colors that are nearly related, and not least, by giving to the harmonies of *color* an advantage over the too great obtrusiveness of *form*—it is in these modes that the encumbered atmosphere of these latitudes gives to landscape much of its ideality and of its poetic value as allied to pictorial art, and to poetry also.

783. It may be thought that, while we are naming the elements of that enjoyment which the eye receives from the aspects of the material world, we should give a prominent place to light and shadow, or *effect*, as it

is called. Light and shadow are ministrative to the visual development of form. Rudimentally considered, they are not pleasure-giving. Among the devices of Art employed for the production of factitious visual impressions derived from the flat colored surfaces, light and shadow, and the more and the less of direct illumination, are principal means of accomplishing its purposes; but if we carry ourselves, in imagination, to a world of light, a world of colors, every substance being phosphorescent, or as if luminous from within, then, and in such a region of commingled harmonies and splendors, we should ask for no heightening of the charms of the landscape by aid of shadow. Shadow is a means of Art, and in the world of nature it takes its place among those arrangements of the material system that are adapted to meet the functions, and purposes, and movements of animal life.

784. Light and shade, or rather shadow, in its various degrees and with its reflected lights, along with color, give us our notion of FORM, and Form comes to be thought of either as bounded in relation to other and more remote surfaces by its exterior contour—its *outline*, or otherwise as a rotund mass. It is in the first-named of these two modes that we learn to regard large and stationary objects, such as mountain heights and public edifices, which are seen from certain fixed points of view, whence their *outline* has an invariable aspect. It is in the second mode that we come to think of smaller objects, and those in relation to which we and they are incessantly varying position, so that it is not one contour, or two, or three contours that become familiar to the eye, but every possible exterior

line. It is thus, especially, that we receive our notion of the human form, which is the pre-eminent compendium of all principles of beauty, and which unites all charms, is formed, and that it acquires consistency. It is because Sculpture meets this condition that its pleasure-giving power surpasses so much that of Painting.

785. The organic reason of the pleasure-giving quality of certain lines and forms, while other lines and forms are either beheld with indifference or are disagreeable, has been the subject of much controversy to little purpose; but it is a question upon which we need not here enter: it belongs to the theory of Art. What we have to do with is the matter of fact, and concerning this fact there can be no room for doubt, or none among those upon whom Nature has bestowed the *sense of form.* This is an instance ranging along with several to which we have already had occasion to advert; it is a case of a *special faculty;* it is an endowment of individual minds, and is denied to other minds. Thus it is as to the musical consciousness both as to the ear and as to the soul. And so the sense of color, and so the sense of form, which are the endowments of individuals. Nothing could be more futile than the endeavor to *talk* any such faculty into those who have not been so fortunate as to bring it with them into the world. But then we are not to deny or to call in question the reality of a gift because we ourselves, or others, may want it. There are more than a few persons who have no power whatever to apprehend an abstraction of any kind; nevertheless, we hold mathematical science to be real and sure.

786. In proof of the *fact* of the pleasure-giving quality of certain lines and forms, and of the want of that quality in other lines and forms, innumerable familiar instances might be adduced. The track of a slow-moving animal, as of a snail, upon a pane of glass or across a floor, has no character, no uniform intention, and is not pleasing; the track of the electric spark across the heavens, although it be associated with ideas of harm and danger, is seen and admired in itself; the angles of which it is composed, and its general direction, have an aspect of *oneness* along with variety, indicative of force, liberty, and singleness of principle. If the electric spark, especially when it is double or treble, as it spans the heavens from east to west, were as enduring as is the rainbow, it would be gazed at as the most magnificent of natural spectacles, and as greatly surpassing in beauty the rainbow, although graced with its prismatic gayety. The outline of common rounded hills against the sky is not pleasing; but mountain ridges, when they are the product of great dynamic changes, are often highly pleasing. Masses of foliage may in themselves be quite unmeaning, but if the shadows of these same masses are thrown by an oblique sun upon a wall, the uniform perspective gives them character and meaning, and the eye is attracted toward them.

787. The contour of fruit-trees—the apple, for instance—does not recommend itself to the eye. That of most forest trees does so. In leaf or in bare branches, the difference holds—to wit, in comparing the wintry orchard with the wintry woodland. The beech, the Spanish chestnut, the ash, the elm, the oak,

whether superbly clad as in June, or naked as in January, are objects upon which the gifted eye rests with untiring enjoyment. Those artistic practices which represent *form only*, and its contours or outline chiefly, as in pencil and crayon sketches, are evidence of the highly grateful quality of this element when taken apart from color. Landscape sketching, landscape tinted drawing, and landscape painting, in which last color and atmospheric effect are combined, may be regarded as demonstration in detail of the several elements of that never-spent luxury which the eye draws from the aspects of the material world. Nature, using the term now in its technical, artistic sense, is as truly now, as at first, man's paradise; it is the scene in which, if it be his lot to linger, advantaged by instructed tastes, he never grows weary, he is never satiated.

788. The copious and higher theme of beauty in the human form is at once *too* copious, and it is of too theoretic a kind to be entered upon in these pages. As to the entire subject, therefore, we do not forget it, but we assign it to a fitter place. Having said this one word, we return to the beauty, and the splendor, and the sublimity of the visible world—to Nature, as it is called.

789. The worn subject-matter of this theme, descriptively treated, must not occupy any portion of our space. What concerns us is this, that, as in regard to musical sounds, so in regard to color and form, the mind, taking its start or gaining its suggestion from the level of its organic perceptions, which in these instances are pleasurable, commingles these perceptions with its emotions and with its feelings of every species

and order. We say *commingles* the one kind of consciousness with the other kinds; but in fact, and as if it were with a galvanic instantaneousness and an intensity of action, these perceptions of visible beauty collapse upon whatever sentiment, feeling, affection, or passion is nearest at hand, and thus the external world as beautiful, and the percipient faculty—the animal organization, and the soul, with its circle of sensibilities, even the entireness of its emotional nature, comes to be so blended as that thenceforward the animal ceases to be animal, and the soul admits, without exception, an aid from its lower nature in following the impulses of its higher nature.

790. The beauty of Nature, as Landscape, regarded as the subject or material of the imitative arts, does, indeed, connect itself with sentiments of a delicious kind, but they are not such as are of the most elevated order. Painting, on *this* ground, is able to administer much exquisite enjoyment, but still it walks on earth; it may not boast that it has wings. The beauty of nature, regarded *in itself* and apart from Art, it is this that leads the way into the region of poetry, and in this region the human mind does not ask wings: it has them, and it soars.

791. So instinctive is the affinity of the emotions and affections with the beauty of the visible world, that a combination between them takes place even when this beauty presents itself under conditions of extreme disadvantage. Take an instance—railways, careering as they do over the chimney-pots of great towns, give us an insight into the attic life of such places, and we see what are its discomforts, and what

may be its embellishments too. On the window-sill of a topmost paper-patched casement there are flower-pots—two or three, with bright geraniums; there is also a choice balsam, just now in magnificent bloom! But look at the Spitalfields proprietor of these floral treasures! To tend them is his first care in the foggy morning. Squalid, indeed, in aspect is this amateur; and as to his breakfast, which must be shared with a craving family, it falls far short of sufficiency for seven. Nevertheless, half starved as he is—worn with eighteen or twenty hours' labor, and his haggard, heart-sick Eve by his side, and his ill-conditioned progeny about him, with annoyances accumulated, and almost all things convenient absent, yet this man is *man*, and therefore BEAUTIFUL NATURE and he shall not be sundered. Man will cling to a memento of his paradise; nor shall any ordinary sufferings wean him from the thought of this, his primeval felicity; and so it is that if this grudging world, with its boundless superfluities, can spare him nothing more, he will yet make himself as happy as a lord with a single flower-pot and a balsam in bloom.

792. Yet this Spitalfields florist is, perhaps, only a "flower fancier," and it may be that there is no poetry in him. But there *may* be poetry in him, for there is in many of his class; and then this single plant, its semi-transparent stem, its leaf, so delicate in structure, and so pure in color and surface, and its exquisite blossom! but who shall do justice to the painting of its petals, scarlet and white, or to the elegance of those petals in form? This plant, if the soul of poetry be in its owner—this flower, as often as he looks at it,

whispers to him of all those things, sweet, bright, rich, magnificent, which make gay and glad the wide sunny world, outlying far beyond and around the pandemonium of want and woe at the heart of which his stern destiny chains him.

793. The same railway which has brought us over Spitalfields shall carry us, not to Chatsworth, nor to any place where wealth and taste lord it over nature, but it shall be to some spot, the like to which there are thousands scattered over this land of hedgerows and cottage homes—places where nature owes the least to art, and where she herself, and not her rival Art, is thought of by those who have learned how to love her. Deep in the recesses of an untouched rural district, where the summer's noon is as silent as a midway expanse of the Atlantic, where there are corn-fields, and meadows, and copses, and uplands—not mountains and rivulets—not rivers—and where there is a cottage and a garden, not a mansion and grounds—there, or in any such place, may the days and years of a long life be passed in converse with beautiful nature, and this relish shall in no wise be more languid at seventy than it was at seventeen.

794. The simple beauty of nature draws toward itself a higher power—that of the infinite—in several different modes; and when it does so, it affects us in another manner, and we call it the sublime. It is true that, apart from any element of beauty, objects may affect us so as that we think them sublime. Mere vastness or bulk does so, and especially if it rear itself aloft, and give the notion of danger, and inspire terror. If one were on the ridge of an ordinary slate-covered

roof, he might imagine the dull surface to be extended, right and left, for a mile without a break; and, moreover, suppose it to stretch down from the ridge to which he clings a mile in depth! there is then before him an idea fraught with terror, and he may say it is sublime. But that which, in a genuine sense, is sublime, we take to be constituted of vastness—a something unknown or infinite, and, withal, an aspect of beauty. There is no grandeur unless there be beauty as well as largeness.

795. It has often been questioned whether the aspect of the starry heavens on a clear night is sublime, for it is said that it is magnificent rather than sublime. The heavens at night, as we ordinarily look at the vault above us, shows itself more as the ceiling of earth richly ornamented than as an unveiling of the universe of worlds. Feeling, as we do, that we *ought* to think it sublime, we have recourse to the aid of astronomy; we look into books of science, and fill our thoughts with the details of the celestial arithmetic. But this factitious process poorly answers its purpose; the human mind is not to be schooled into impressions; it will not rebuke itself into admiration, nor be drilled in wonder.

796. But if we can imagine ourselves to have distanced this earth far enough to bring it into visual comparison with its neighbor planets; if we could look round upon these spheres, each speeding away on its own year path, and could so think of this cluster as should aid us in looking outward toward the next proximate cluster; and if it were granted to human eyes to gaze upon the fields of the universe with

a consciousness of the millions of spheres, shining and shone upon, that crowd these spaces, then there would be no room for the question, Is the spectacle of the heavens sublime?

797. After having thus glanced at the beauty of the visible world, and noted also the organic origin of those emotions which connect themselves with music, we reach the border of another subject, demanding to be considered by itself, namely, the relation of the human mind to the unknown and the infinite.

XXII.

THE RELATION OF THE HUMAN MIND TO THE UNKNOWN AND THE INFINITE.

798. THE relation of the human mind to the unknown and the infinite! What is it that we mean? It may be a real but an unconscious relationship, or it may be a real relationship of which all men have a more or less distinct consciousness, or it may be a real relationship of which certain classes of minds only are conscious, while others are not so in any sensible degree. We take it in this last sense.

799. There are many to whom the very terms wherein we express the assumed fact of any such correspondence would be either an enigma or a subject of mockery. Just so it is as to the several branches of abstract philosophy, mathematical and physical; for to very many around us this is a region unapproachable, and an utter blank; just so it is as to the bright fields of elevated sentiment—the world of taste, of

feeling, and of poetry—to multitudes around us; just so it is as to the regions of Art, to multitudes; just so it is as to the loftier and more generous moral impulses, to many; just so it is, to many, as to what we now affirm, namely, the relation of the human mind to the unknown and the infinite: it is as if it were not.

800. Those to whom it would be so are found to occupy extreme positions on the intellectual scale, as thus: there is the very lowest and the most degraded order of minds, whether in the depths of civilized communities or in the wilds of savage life, whose eye, from youth to age, is never diverted from its earthward fixedness; then there are the frivolous, and the sensual, and the sordid, of whom there are many in every luxurious community; and then there are those who have reasoned themselves out of every belief, and have allowed sophistry and paradox to consume within them the very viscera of the moral life.

801. Notwithstanding any such exceptive instances, or all of them put together, the human Mind does in truth stand in a real relationship to the unknown and the infinite, and of this relationship it has a vivid consciousness, unless, indeed, its genuine perceptions have been, as above said, overborne.

802. It is on occasion of some contrast or some antagonism that the idea of this relationship most often presents itself. In search of an instance, we go back to the subject of the last section. The beautiful in Nature seldom presents itself otherwise than under some condition of imperfection and limitation. The flower-garden has its cankers, and its blights, and its fading and decaying splendors. The bright landscape

of June suggests a contrast with the rigors and discomforts of February. The beauty of the material world is just bright and fair enough to stimulate that imaginative faculty the creations of which could never be acclimated to earth. So it is that this sense, which opens to us so much of pure and intense enjoyment, does not fail to suggest conceptions which can never be realized unless it might be in some brighter and distant sphere. From the cottage flower-garden, such as it shows itself on a summer's morning, there is a pathway which the imaginative man does not fail often to tread, leading to the unknown and the infinite, even to a world of absolute beauty, and of beauty never to decay.

803. On a path that is still more direct, the human mind finds its way toward the unknown and the infinite when we stand in presence of those objects in nature which give rise to the emotions of sublimity. In front of Alpine altitudes, with their vast upheaved masses, commingled cloud, rock, glacier, cataract, there is excited not simply admiration and awe, but there is a feeling that these terrestrial marvels are samples only, shown off upon this planet in order to suggest to man the idea of scenes in some other world still more stupendous. If earth has its Alps, and its Andes, and its Himalayas, what shall be the spectacle of awe which a world unknown might open to our gaze?

804. Telluric catastrophes, volcanic eruptions, earthquakes, deluges, and whatever else combines ideas of destructive force with the conception of sublimity, has a further influence in carrying the mind, if it be sensitive in this manner, into those abysses of imaginative

terror where the unknown and the infinite may be conceived of as unveiling their powers to the utmost.

805. There is yet a path which may be trod with less trepidation, and with more fruit and advantage. The nocturnal heavens may at a first glance seem more magnificent than sublime; but undoubtedly it *is* sublime when, by aid of reason, we penetrate this magnificence, and become cognizant of the reality which is beyond. Now there is here to be noted a change in our modes of thought which has been long in progress, and which is now advancing toward its consummation. This consummation will bring with it a consciousness of relationship to the unknown and the infinite of a far more substantial and impressive kind than hitherto has been admitted.

806. The Hebrew lyrist, it is manifest, had, in the course of his midnight meditations, learned to penetrate beyond the visible screen, with its shining decorations. "When I consider Thy heavens, the work of Thy fingers, the moon and the stars which Thou hast ordained"—these modes of expression indicate what we might say was an *astronomic conception* of the celestial mechanism or framework—a scheme of bodies in movement, in comparison of which vast masses and movements man and his petty fortunes seemed of small significance. But this same scheme, as to its vastness and these motions, was then unknown, and, as unknown, the starry heavens most fitly symbolized the divine attributes: they spake of God to man, and they set forth to his intellect and to his imagination the relationship of the creature to the Creator.

807. This continued to be the ground or condition

of astronomic sentiment among those cultured nations that had not admitted the scientific spirit, and that lived remote from the schools of philosophy; but in other regions the abstractive faculty took the lead, and Science made its inroads, not only upon delusions and upon illusions, but also upon the ground of genuine religious sentiment and of (true) poetic feeling. The advances of the strict and demonstrative sciences have a constant tendency to drive off from the field they occupy, first, superstitions and popular errors, and then religious feeling. It is not because scientific discoveries and demonstrated principles contain in themselves aught that is contradictory to a rational religious belief, but it is because the faculties which are called into exercise, and which are powerfully stimulated in the course of scientific pursuits, are antagonistic to *feeling* of every kind; or, if they do not make war upon genuine and spontaneous emotions, yet they quash and neutralize them.

808. A scientific age may, by chance, be also a religious age; but if the two powers are ever synchronous, it will be only because they occupy spaces in the community that are far remote from each other, and between which there is little or no intercourse.

809. But in course of time, that which comes about is this: the discoveries of science and its ascertained facts make their way from the centre, where they originated, outward and abroad among the people: first, it is the more highly educated that receive them; and at length the broad popular mind admits and assimilates whatever philosophy in conclave has achieved. When this sporadic assimilation has well taken place,

then the very facts which, in the process of their discovery and establishment, had driven off all feeling—poetry and piety—return to their place of rightful influence in nourishing and in stimulating feeling, poetry, and piety.

810. So it is with us just now. It is quite within a recollected time — a fifty years — that science has made an outburst upon the fields of infinite space and of infinite time. Although the modern Astronomy is of a much older date than this, it is only within this period that it has made sure what, in the last century, were little better than bold conjectures, and that it has established itself, and has won a firm position at a remoteness in the universe which, although it be far beyond the range of conception, is yet within the range of reason, and is cognizable, also, by the eye.

811. As to that inroad upon the fields of unknown time which Geology has made, it is altogether recent, and that first consequence of a great scientific movement in the dissipation of ancient suppositions and the quashing of popular notions has not yet had its full course. A little while must still be allowed before geological science, and popular feeling, and genuine religious conceptions can reach their due respective positions, and regain the equilibrium that has been so much disturbed. Yet even now this perturbation is subsiding, and we are in near prospect of its permanent adjustment.

812. Let Astronomy and Geology adjust themselves fully in relation to the cultured popular mind—let the latter especially forget its querulous mood of contemptuous assault upon what it deems to be "ignorance and

fanaticism," and then the tranquil result of discovery in both these fields—the astronomic and the geological—shall be of this sort, to take the first of these: On the field of the boundless celestial spaces, the known and the unknown, the finite and the infinite have been brought home to all instructed minds in a manner which is quite new as *an influence*, silently taking effect upon the human reason, and which is in course of greatly deepening and extending the most profound of its convictions.

813. The surest of all the several modes of knowledge, namely, the eye, and the infallible methods of mathematical reasoning, combine to remove every shade of uncertainty or ambiguity from the celestial field, so far, indeed, as we may rightfully profess to have explored it. Processes of reasoning, each of which is sure in itself, and is doubly authenticated by the coincidence of different lines of proof, establish a belief which the eye, aided by the telescope, follows out and recognizes: it is Sense and Reason together that carry us out to the orbit of the most remote of the binary stars, and that there give us an assured intellectual standing. But where is it? The customary answer is, At the *outskirts* of the material universe, or near to its outskirts. But why do we thus assume that of which we have no evidence, but where, on the contrary, such evidence as we may find carries quite another meaning? Two motives, but neither of them of a substantial kind, oppose our further progress. Project the right line AB from this, our solar system, to the most remote of the now-resolved nebulæ. Then produce it further in the same direction to C. Let BC be

equal to AB; and then why should we not assume as a fact that which is far more probable than the contrary, namely, that this further line traverses spaces which are occupied, like the spaces measured by AB, with material bodies, shining and shone upon? The two prejudices contradictory of this supposition are these: there is first that which rests upon the metaphysical axiom that matter can not be infinite, and therefore that it must come to its end somewhere; and as well end itself at B, or a little way further on, as any where else. The second of these contradictions is purely of an imaginary kind, or we may say it is simply a prejudice of feeling. The human mind is aghast at the conception of material infinitude, and it craves permission to girdle creation somewhere—say a little way beyond the range of the telescope.

814. We shall soon learn to get ourselves intellectually free from both these restraints, and then we shall come under the influence of a conception or an irresistible belief, which, although it can neither be expressed in due form of words as a proposition, nor yet entertained as if we could grasp it, shall exert a great influence in ruling the conceptions of all minds that are capable of sustained thought.

815. In like manner, the boundless or the infinite in Duration is brought home to us by the recent revelations of Geology. On this field, as on the fields of Astronomy, the KNOWN mingles itself by insensible degrees with the UNKNOWN and the Boundless, or the Infinite. Just as, in Astronomy, those facts, on the strength of which we travel out toward the infinite, are immediate objects of sight, so in Geology, those facts,

on the strength of which we go back toward an era incalculably remote, are under the eye, and, moreover, they are in our hands. Palpable samples of organizations that are too ancient for our arithmetic to express its terms in its customary symbols take their place in our museum alongside of the most recent exuviæ. These samples, although they are known and finite, yet in a true sense do they set forth the unknown and the infinite of the material universe; and so the remotest nebulæ are known and finite, but they speak of that which is unknown and infinite in the conditions of the universe.

816. The two great sciences, ASTRONOMY and GEOLOGY, which both of them may be called *recent* in respect of the long preceding ages in which they were not, are so far of unequal date as that the one of them has already worked itself into the popular mind, while the other is only beginning to lodge itself there. And yet the latest born has far outstripped the elder in one respect that gives it an incalculable advantage. It is Geology that—let the expression be admitted—has breathed a history upon the mechanism of the material universe, and has taught us, while looking at its seemingly unchanging features, to think and to speak of eras, and of beginnings, and of progress, and of consummations.

817. Astronomy long before had whispered the same truths, and had obscurely taught man to interpret the periodicity of the celestial motions in this very sense: "these all," it had said, "shall wax old as a garment, and shall be rolled up as a scroll;" but Geology has now spoken aloud of a beginning and an

end, and in so uttering her voice has shown man that he himself had a destined moment in the evolutions of the planetary scheme.

818. Yet this chronologic revelation has too recently been uttered to develop its meaning as related to our modes of thinking. This meaning is, however, coming to the surface, and the cultured popular mind will ere long accept it, and will then give it a place among universally-accepted and unquestioned principles. It is not merely a chronology of the planet that is spreading itself out before us in our museums—it is a scheme, and it is a unity of purpose, the issues of which have been foreshadowed from the very commencement; it is a constant movement in which the human family is included, and the events of the last hour of which were typified at the very dawn of life.

819. As if expressly for the purpose of excluding those vague suppositions which might grow out of these recent revelations of the boundlessness of the material universe, another revelation has run on contemporaneously with them, namely, that of which the microscope is the instrument. The infinite of the material world is not—so the microscope teaches us—a confused vastness, but it is the infinite of perfection—perfection carried down to the dimensions of an undulation of light, or, if we please, to the diameter of the lenses of the eye of an animal, millions of which may be found careering in a drop of water.

820. The proper theologic inferences that may be derivable from what is now understood concerning the infinitude of the universe are not our subject at this time. What we have to do with is the fact that the

relation of the human mind to the unknown and the infinite has, in such a way, been *now lately* opened up by these two young sciences, Astronomy and Geology, as serves to give validity to a fundamental principle of a better logic, and to add confidence to the steps of those who, hereafter, shall advance upon the arduous paths of a higher and spiritual philosophy. This fact claims attention.

821. Astronomy, as we have said, travels outward from its beginning on this planet, and it goes a long way forward into space upon a path that is solid as adamant, and it continues to move onward toward the unknown without a tremor, for at any moment it may securely trace its steps homeward. And in like manner the sister science, Geology, begins its boundless course, as we may say, in a garden, or in a gravel-pit, or by the road-side, or by the sea-side, and it goes on, risking no dangerous leap, attempting no flight, but treading forward in the midst of things that are visible and palpable, steadfast in its adherence to the surest principles of inferential reasoning: it goes on until it has made good a standing at a point so remote from the present moment that the mind averts itself from the thought of the awful intervening lapse of cycles of ages.

822. Now the logical principle which grows out of these methods of reasoning may be imbodied in these three propositions:

1. The Infinite, although it is not to be comprehended by the human Reason, may be infallibly apprehended by it, or may be brought within its cognizable range, and may be known as *unquestionable*,

though it is not known as to its constituents or its conditions.

2. It is a safe and sure course for the human Reason to take up any of the constituents or conditions of the human constitution, intellectual or moral, and to follow it out inferentially, even though it may lead us toward the unknown and the infinite. We may do this so long as each inferential step is itself *a fact* or *a relation* included in that constitution.

3. An inference may be admitted and relied upon as being itself a fact or a relation belonging to the human constitution, when, if we refuse to admit and to rely upon it, every kind of inferential reasoning ought, at the same time, to be mistrusted and rejected.

823. The human mind connects itself with the unknown and the infinite in various modes of undefined feeling, and of intuitive or irresistible persuasion. Man has ever recognized, in some form of belief, his relationship to a world that is not cognizable by the senses. Toward these undefined impressions the mass of mankind, in all countries and times, have shown themselves vividly sensible, and the multifarious superstitions of nations, ancient and modern, are so many products or consequences of this same consciousness toward an unearthly universe and toward unseen powers, beneficent or the contrary. Of these many spurious phases of the religious consciousness we need take little account at this time; they would claim to be included in a comprehensive "Natural History of Religion." What is of far more significance is to note the now-advancing progress of thought, which is at work in combining our recently acquired knowledge of the In-

finite in the material universe with that genuine and only theologic belief which is worthy of much regard —we mean the theology which modern nations have derived from the Canonical Scriptures.

824. As to all other beliefs, whether they be twenty or a hundred, they are museum subjects; they should give occupation to philosophical antiquarianism; but in any practical sense we have quite done with them, just in the same way as we have done with the Physical Sciences of antiquity; they were good in their time, but that time is past, and they may be forgotten.

825. The only form of truth, moral and spiritual, concerning the Unknown and the Infinite which in this age we need to be concerned with in serious mood, has reached us in that one way which alone could give it fixity among the multifarious and interminable evolutions of Meditative Thought: it has come to us in the categoric or peremptory form of an attested utterance from the unseen world. Thus reaching us, this body of religious truth takes its position alongside of our modern Physical Science in this way: the two revelations—the Physical and the Religious—both of them lead on toward the Infinite and the Unknown, and both alike take their departure from that which is intelligible, and definite, and certain. Both alike are leadings forward from the less to the greater—from the Known to the Unknown; but they are not leadings from that which is sure and unquestionable toward that which is merely conjectural.

826. Justly to be suspected, and indeed to be rejected as utterly presumptuous and delusive, would

be any scheme which should pretend to bring in an aid from our recent scientific discoveries for the purpose of putting some new and more scientific construction upon our Biblical Theology. Any such scheme would deserve its fate when speedily consigned to its place among ten thousand forgotten quackeries.

827. That which may be looked for as likely to come about, and which would be beneficial in its effects, is of this sort. In the prosecution of the modern Physical Sciences the human mind has demonstrated the congruity of the human Reason with *that* REASON of which the material universe is the product; for when we say that (within certain limits) we understand the scheme of the world as to its structure and as to its dynamics, we affirm that the mind which understands and the MIND which has produced this scheme of things are in unison, or that they are convertible the one into the other.

828. It is an indication, or it is a consequence of this congruity, that the human Reason, following the least fallible of its means of knowledge, has lately extended or expanded so immeasurably its personal consciousness toward Duration. As this consciousness is a prime distinction of the human mind—for man alone, of all creatures around him, concerns himself with the past and with the future—so is each extension of this consciousness a note and a measurement of the advancement of the individual mind, and also of the advancement of races and communities. The wider the prospect which the individual man enjoys over the fields of Time, the greater is he in all his sentiments, and the nobler in his modes of action, and

the less is he the abject and passive creature of the present hour.

829. Now, on the ground of this principle, it is a fact worthy of all regard that the modern mind has incalculably extended its view over the illimitable fields of Duration. This extension is not a vague apprehension of countless cycles, but it is a strict measuring of times, either absolutely, as in the instance of the celestial revolutions, or relatively, as in the Geological eras. The two sciences, together and separately, invite us to tabulate the chronology of the universe, and they aid us in becoming familiar with dates, compared with which the human history fills only an hour.

830. So it is, therefore, at this time, that thought-addicted minds are led out toward a position whence a prospect may be had upon which none but the inheritors of immortality could dare to open the eye—nay, upon which no eye which is itself of short date would ever fix itself otherwise than with a vacant gaze.

831. At this present time all things are conspiring to bring thoughtful minds into a new conscious relationship with the unknown and the infinite on the field of Time. The deathless energies, the agonies of human affection, have always uttered an outcry for immortality; it is the first need of the human heart. The moral instincts, unquenchably vivid as they are, have always demanded the future, and have told us that that future must be endless. The unspent energies of Reason, full of force as they often are, even to the last moments of the animal organization, ask for the future, and could more easily accept annihilation now than imagine it as the end of a higher course.

The only theology which can be thought of as true affirms, and builds itself upon a boundless futurity; and now, and as if it were the silent preliminary to a universal acceptation of this belief, the two surest and greatest of the Sciences are beckoning us to follow where they lead, even to a ridge whence man, immortal as he is, may take his range, this way and that, over boundless fields of duration, and may learn to know himself as the heir of an endless existence. It is thus, then, that the unknown and the infinite are now, in these last days, in course of opening their mysteries to human thought and feeling, not on the unfenced fields of metaphysical speculation, but on the charted pathway of direct knowledge and demonstration.

XXIII.

GENERA AND SPECIES IN THE WORLD OF MIND.

832. In that strict and unambiguous sense in which the terms *Genus* and *Species* are applied to the several kinds of vegetable and animal organization, we must not think of applying them to any of those differences which present themselves within the World of Mind. Organizations, vegetable or animal, are classified on the ground of a sameness and a difference which are precise, and which are constant, and which are cognizable by the eye and the hand. But as to any differences that may distinguish mind from mind in the human family, although they may be great if we

think of the interval between extreme instances, it is so indefinitely bordered that only in an imperfect manner can it be kept apart from its confines above it and beneath on the scale.

833. It is, then, only in a less exact sense that we may speak of Genera and Species in the World of Mind. It is not as if the differences were not *real*, and some of them are very great; but it is only when they are the greatest that we can mark them off with certainty.

834. Two questions, each of them carrying with it some weighty consequences of a practical kind, meet us at the outset on this ground. The first of these questions relates to the difference between the Animal Mind in the orders around us and the Human Mind; and we have to ask, How great is that difference, and what are the distinctive characters of the two? The second question is this: Within the human family, or the several races that are allowed to belong physiologically to the genus or the order HOMO, are there any differences beyond those which should be regarded as *varieties* only, or as individual deviations from a common type? Or otherwise to put the question: Are the several races of the human family distributable into Genera and Species in respect of their intellectual and moral endowments?

835. Questions so grave as these would demand treatises for arriving at a conclusive answer. Yet even in an elementary book they claim to be brought forward, and to be assigned to their due place in our compendium of the subjects belonging to Mental Philosophy.

836. In regard to subjects of this kind, it is a mistaken anxiety that would at all restrict the freedom with which we should discuss them, as if any conclusion we might arrive at, on either side, were likely to bring into jeopardy some article of our religious belief. Religious belief is indeed always endangered by ignorance, by superstitious apprehensions, or by a blind dogmatism, but it can have nothing to fear from the calm and independent pursuit of truth in matters of Philosophy.

837. In inquiring concerning the difference between the animal mind in the lower orders and the human Mind, we might be prompted by an ill-judging anxiety for securing the doctrine of the immortality of the human soul to start with the assumption (wholly gratuitous as it is) that the soul of Man, being a pure and simple immaterial substance, is *necessarily* immortal, for it is imperishable in its very nature. Then, having taken this hypothetic ground, and feeling a repugnance to the doctrine of the immortality of the animal orders, we find ourselves compelled, by logical consistency, to affirm that these lower orders are not partakers of Mind; that they have no soul; and then our alternative must be this: that the animal mind is nothing more than a function of animal organization, or that consciousness and voluntary action are, what Materialists affirm them to be, products of the brain or of the nervous substance in the ganglia.

838. But this is indeed a perilous admission. The indications of mind in the animal orders being such as they are, and touching so closely as they do upon analogous facts in human nature, we shall find ourselves

entangled in an utterly impracticable and hopeless argument when we attempt to confute materialism as to human nature after we have conceded its main points in relation to the brute mind.

839. The doctrine of the immortality of the human soul rests upon its own ground, and will be quite safe so long as it is left to rely upon its proper evidence. So far as religious opinions of any kind are implicated in scientific inquiries, it is of far more consequence to establish the great principle of the absoluteness of the difference between Mind and Matter than to insist upon a distinction between the higher and the lower orders of Mind, which, if indeed it could be established, would merge that distinction, and would hand us over, without help, to Materialism.

840. Our assumptions are these: *first*, that the identity of the lower and the higher orders of Mind is such as to support the belief of the essential homogeneousness of the two; and, *secondly*, that the points of distinction between the two are so broadly marked and are so well defined that they must be held to indicate a generic and inconvertible difference.

841. In the preceding sections we have stated what those points of identity are which support the conclusion that MIND is *mind* in all those orders of organized beings that, by means of consciousness and voluntary action, are qualified to defend and conserve their individual well-being. To those points of difference which constitute the prerogatives of human nature we shall presently advert, but first may inquire whether MIND, as developed in the animal orders, might be brought under any system of classi-

fication, so as to be distributed into *Genera* and *Species*.

842. We might, for instance, take, as the grounds of classification, the more obvious characteristics of the animal orders, considering them as distributable under such heads as these: the predatory and ferocious; the insidious and wily; the habitative and constructive; the gregarious and ruminative, and the solitary; or we might assume, as the basis of a broad distinction, the predominance of what we have termed Fixed Reason, or of its opposite, Free Reason.

843. But now, on any such ground as this, the fact will present itself, that the Genera and Species of Mind in the animal orders are not conterminous with those distinctions of Genera and Species which have respect to external form and to organic structure. A moment's attention to facts will show this: the animal orders of all classes are divisible into the consumers of vegetable substances and the consumers of the living substance. Now, to take these latter, the carnivorous, the predaceous, the wholesale swallowers of swarms, or the insidious entrappers of a single victim, we must run the round of the animal system, through the mammalia, the birds, the reptiles, the fishes, the insects, the infusoria. An indictment on the general charge of inflicting death at the impulse of appetite embraces creatures of all varieties of form and functional structure—the tiger, the pike, the lizard, the spider.

844. If, then, we were to assume this predacity, with its fierceness of temper, and its remorselessness, and its wiliness, as a generic characteristic in the world of Mind, then, as we see, it must embrace very many

orders, and genera, and species, such as they are classified by the Naturalist. The same fact presents itself, whatever may be the disposition or the tendency which we take as the basis of a distribution into genera—it may be Constructiveness, or the gregarious instincts, or the domesticable faculty. We shall be driven, therefore, into the perplexity of a double scheme of classification, the one of which will nowhere be conterminous with the other.

845. The effecting of such a classification would be a worthy object of scientific industry, and those who addict themselves to Mental Philosophy would look on with animation while it was in course of completion; but it is manifest that the grounds on which it must be carried out would be *physiological* much rather than intellectual or moral. The mental disposition—say the predaceous energy—indicates itself not merely in certain habits and modes of action when the prey is in sight, but by certain characteristics of the form, or, as we should call them, physiognomical analogies. The hyæna, the shark, the kite, will be found to be allied in facial contour or in some other, and perhaps more occult accordances of line and color; and therefore it must be that, in the process of digesting a scheme of classification on the ground of mental identities and differences, we should at every step be led forth upon the path of Physiological Science: it would be from *this* field that we must gather the mass of our evidences. The task may be an inviting one, and by no means unimportant, but it is subject to conditions which barely consist with the style and usages of Intellectual Philosophy.

846. This passing reference to a large subject must be enough in this place. The first of the two questions above stated demands more attention. The essential homogeneousness of the animal and the human Mind having been assumed, then the question presents itself, What are the precise points of difference between the two, vast as that difference is?

847. In the preceding sections we have incidentally mentioned the most obvious of these differences, and have spoken of them as "points of divergence" (Sect. XI.) of the higher and lower orders of Mind; but perhaps they would more correctly be named points of *departure;* for, in truth, wherever it is that the human Mind contrasts itself with the brute mind, *there* and *thence* it is that the higher mind starts forward upon an interminable path, leaving the lower mind forever fixed at the same spot.

848. If we were to look, not so much to the inner causes of the difference between the two orders as to the consequences and the products of that difference, then these consequences challenge attention on that very ground where theorists of a certain class are apt to take their argumentative stand, and to allege that when Man—the savage, and while he is in what they would affirm to be his primitive condition—is brought into comparison with the nobler orders of animals, scarcely any advantage over them can be claimed for him; on the contrary, the balance of good qualities and of well-doing is on the side of the perfectly conditioned and the rightly conducted quadruped.

849. It is when we find him fallen into the depths of physical and moral perdition (which is never, and in

no sense a *primitive* state) that we may with the fullest confidence predict for him a boundless advancement, if only he can be led to set a returning foot upon the road of his better destiny. The brute never falsifies his destination; he never fails to reach his ultimatum of possible good; but Man fails to do so, because, while far more is *possible* to him than is embraced in any impulses which he shares with the brute, even his *animal* well-being is made to be dependent upon his pursuit of a higher good than that.

850. Mind, in all orders, indicates the simplicity of its structure as well in its active as in its passive rudiments (268), and suggests the belief that it is One Element, or that a single principle is endowed at once with Power and with Sensibility toward the material world. Power introvertible, and consciousness in a reflective sense, may be universal properties of Mind, and yet may be feebly developed in the animal orders, while they are decisively developed only in human nature. So it is that those instincts which, in some orders, approach the border of the social affections, come to their end short of it.

851. We have said (313) that there is nothing in the constitution of Man which has not been dimly symbolized in the structure of the lower orders, and this general principle holds good in relation both to body and mind. As it is with the emotions and affections, so is it with the intellect. That which develops itself with a boundless energy in Man just claims to be noticed as a rudiment—a mere germ in the structure of the animal reason. There is little, if any thing, in human nature of which we can be warranted in deny-

ing absolutely the elementary existence in the animal nature. Not merely does Reason hold its sway in the animal world as a fixed product of Mind, a stereotyped mechanic process, but it rules also to some extent as a free force, adapting itself to the variable occasions of each moment. Nevertheless, there is a degree of *development* in the one nature of which nothing beyond a dim indication ever presents itself in the other nature, and this development affords ground enough, *first*, for the conclusion that there *is* a generic difference between the one and the other, and then for our after conclusion, that no such generic difference has existence among the several races of the human family.

852. Of the difference between the rudimental or *germ* condition of a faculty, and the condition of the same when it is freely developed, we find an instance in that conscious individuality which results from our feeling toward the world around us as an independent and extraneous existence, to which the EGO stands opposed.

853. In the animal mind, the ripening of sensations into perceptions is a process which seems to take place instantaneously, or nearly so, in the first moments after birth; but with the human infant it results from a lengthened course of experiences, including frequent mistakes, and the slow correction of them, which bring about this same transmutation of organic sensations into their final state as *cognitions of external objects.*

854. The relations of the animal well-being and of the animal agency toward the external world are few and uniform, but the relations of the human well-being (animal and emotional) toward the external world are

many and variable. Those objects around us with which we have most often to do, as desirable or as undesirable, come before us under infinitely varied complications with other objects, and with our own feelings, and appetites, and purposes at different times. From these ever-shifting complexities it comes about that the very same objects are regarded in a wholly different mood at different times, even within the compass of an hour. Hence it is that the human consciousness of the Ego congests itself into a *principal* consciousness, or a leading and a ruling mode of Thought, and this thought finds its counterpoise in the thought of the external world as related to ourselves and we to it, sometimes in one manner and sometimes in another manner.

855. On this ground, then, there comes before us an instance of an incalculable divergence of the one order of mind from the other order, arising from a higher complexity in the structure of the one than is found in the structure of the other. While the habit is forming of regarding the same external object with varying feelings, the human infant is receiving its early lesson in the exercise of the abstractive faculty.

856. But a still more advanced lesson on the same path is received when, in place of the external object present to the senses, the mind has to do with its own stored and much-intermingled conceptions of these objects among which it exercises that disposing power which is its prerogative. The actual objects of the external world may affect us in several different modes, and they may *find us* in different moods; but as to our treasured conceptions of such objects—these, sep-

arable as they are into their elements, and liable as they are to infinitely varied combinations, may, and in fact do, affect the mind in modes that are varied and changeful to an incalculable extent. It is among these gambols and fortuities of the conceptive faculty that the human mind learns to exercise its UNCONDITIONED CONTROL over the boundless stores of Thought.

857. The point of divergence of the higher and the lower orders of Mind we have already considered in Section XI., and if the suggestions therein advanced were pursued to their extent, the difference between the two orders of Mind would present itself conspicuously. The conceptive faculty undoubtedly belongs to Mind in the lower orders, but there is little reason to think that a control over its combinations is exercised by them any more than it is by the human mind during sleep.

858. But if this sovereign power has but once been exerted, then the emotional element—the intellectual and the moral—comes into play, and thenceforward a perpetual interaction is taking place between the free Mind Power and the emotional quality of those stores which the conceptive faculty is ready to supply in boundless abundance. So it is that, in the exercise of its liberty upon its materials, the human mind creates its own world of feeling, whether it be pleasurable or painful, and it enters upon an interior life, in which the rudiments indeed are found in minds of inferior species, but of which no developments—no products—present themselves any where beneath the human level.

859. The sports and gambols of the young of ani-

mals are outbursts of superfluous or unoccupied muscular energy or unspent nervous stock. The sports and gambols of the infant Man have the same origin; but the self-devised *amusements* or the pastimes of the human infant are utterances of that power by which, with incalculable velocity, the Mind fashions new worlds out of its own materials. The rude toy, the shapeless block, the tile, the brickbat, the pebbles, the straws—these are symbols, and each of them is, or may be, the representative of things large as worlds and bright as suns.

860. It is from the readiness with which the Mind puts together anew the ingredients of the conceptive faculty that the Sense of Resemblance (400) is so often and so easily awakened. Five straws have been brought into a certain juxtaposition upon the pavement by a gust of wind. In this inter-relationship of lines the human eye catches how many images of things great, remote, grotesque, supernatural? There is, perhaps, a royal personage with his crown and sceptre; or there is a volcano in eruption; or there is a ship driving before a gale; or there is a pair of knightly foes intent upon each other's destruction. Are there any facts on record whence we should be warranted in conjecturing that the most sagacious of animals derives any similar pleasure from a similar fortuity? We think not. But then we have in view a product of Mind, incalculable in its consequences, arising out of a complicity of faculties which belong, *in their mere rudiments*, as well to the lower as to the higher orders of Mind.

861. We have briefly named in the twelfth Section

the Intellectual Emotions which prompt the human Mind to set forward upon those courses of intellectual labor of which Philosophy, and the Arts of life, and the imaginative arts are the product. The one characteristic of these emotions is this: that the exciting cause—the object immediately pursued, and so eagerly caught at when near at hand, is either something that is absolutely irrespective of the material well-being, or it is related to these ordinary and lower interests only in an oblique, indirect, and remote manner. It is the distinction of the human mind to follow, with the utmost intensity, objects which are situated quite outside of the circle of personal and common enjoyments. Mind, in the lower orders, gives no indication of being liable to impulses of this kind.

862. This same distinction is broadly marked in relation to the social and cementing emotions and affections spoken of in the seventeenth and eighteenth Sections. In the lower orders, the social affections, if so we may call them, find their object among beings that are proximate both in time and space: it is one of the same species (with rare exceptions) now present and in view. Human affections, like electric influences, flow out to great distances with unabated intensity. Distance does not weaken them, time does not slake them. Human affection, whenever it rises above or goes beyond an instinctive fondness, draws to itself a force derived, though unconsciously, from the unknown and the infinite of a life hereafter.

863. By introverted action—by the incessant revolving of the elements of the past consciousness with the present and the foreseen future, the human mind

learns, first, to contemplate the individual lot as a continuous experience—a history, and then to think of the personal welfare of those most loved within its circle in the same historic sense. Human affections, therefore, are drawn out, without a weakening of the texture, to incalculable extents. The fibres of Love —sensitive in the highest degree—penetrate the dark future, as well as embrace all distances of earth.

864. When thus thought of, it is manifest that a vast interval separates the animal nature from human nature, even without including that which connects man with a moral and spiritual economy, and which would open before us an interval immeasurably more vast. There can then be no room for controversy—there is no pretext for paradox when it is affirmed that, as in respect of the intellectual faculties, so, and not less decisively, in respect of the social affections, a difference presents itself between the lower and the higher orders of Mind which is great, and is broadly marked, and is *constant* also. In a word, the difference is not one of *degree*, but of *Genus*.

865. Yet in relation to any practical inference, it is enough if we affirm only this—that Mind in human nature possesses an amount of introvertible or reflective power so far surpassing that of the animal orders that the two natures are even more decisively contrasted in Mind than they are in visible form and structure.

866. It is but at a few points that the human system infringes upon the great community of animal life in any mode of interference or invasion; for if, indeed, that community could be numbered, then the few millions that are annually devoured by man, and those

that are reduced to servitude for his convenience, would seem *too* few to be much regarded: they make up, at the most, only a small exceptive case.

867. None but Oriental mystics, or the most whimsical theorists among ourselves, have gone so far out of the road of common sense as to lodge a complaint against the lords of the world on the ground of their carnivorous practices, or of the task and service which is exacted of the horse, the camel, the elephant. There can be no need to enter into controversy with those who might profess doctrines so unsubstantial, and who, if they would be consistent, should devise means for spending their years on the summit of mountains, above the highest region of insect life. We take it for certain that, when the slumbering tenants of a hive are stifled in their beds, and when man converts to his "own use and benefit" the stores they have amassed, no wrong is done; there is indeed a spoliation, but there is no robbery.

868. When Rights and Wrongs come into question, it must be among those who in mind are so far fellows as that the sufferers are competent to plead their own cause, and they may do this if indeed they have any consciousness of the wrong. It is not the dimensions of an *os calcis*, it is not a facial angle, it is not a prognathous profile, and certainly it is not the precise quality of the secretion in the *rete mucosum* that can be admitted to prohibit their urging the plea of justice on the ground of humanity, if themselves have any notion of justice.

869. Nor is it any individual inferiority, whether as to the Reason or as to the Emotional sensibility, that

can bar an argument of this sort. The inferiority of the infant, and of the aged, and of the imbecile, and of the sick, does not throw any shade of ambiguity upon questions of rights and wrongs. On the contrary, so far as a consideration of the helplessness that attaches to any such inferiority can be admitted to affect our conclusions, it must be, or it will be so with all but the basest minds—it must be to enhance the sacredness of those rights which the strong and the astute might be tempted to violate.

870. There are two conditions which should attach to any inferiority, intellectual or moral, that is admitted as the ground on which the rights of humanity are denied to those whom the physiologist allows to be human. The first of these is this: that the alleged inferiority is so broadly marked as that it can be liable to no uncertainty in single instances; for if it be not thus clearly marked, then the strong and the rapacious will be prompted to adjudge such cases in their own manner. On such a supposition the foundations of human society would be shaken, for the feeble and the unwary would every where become the victims of the robust and the crafty.

871. The second of these conditions is this: that the inferior race or the subjugated class should, by structure of mind—by its generic constitution, be incapable of admitting and of harboring the consciousness of being the victims of a wrongful system, and should not be liable to any of those intense emotions that impel the sufferer to look upon the inflictor of suffering with hatred, and to regard him as an enemy.

872. The reason of this second condition is obvious.

A harbored hatred or resentment, prompting the victim to purposes of revenge, is a reciprocated feeling. The inflictor of suffering—the doer of a wrong, never fails to entertain a reverberative consciousness which inspires him with terror, and which suggests to his fears measures of precaution and acts of intimidation. And thus suffering is added to suffering, and wrong is heaped upon wrong. It is a universal law that wrong is the first of a series of wrongs. Now it may be held as certain that we are running counter to the great laws of the sentient world whenever any suffering is inflicted which enhances and repeats itself in a geometric ratio. So much pain as is necessarily implied in the constitution of the world has this property, that it terminates in the instance—that it is not cumulative: its ratio is only arithmetical.

873. What a world of bolts, and bars, and chains, and terrors—what a weapon-bearing and armor-wearing world this would be, if the sheep and bullocks in a pasture, if the geese on a common, if the poultry in a farm-yard, were always regarding the men and women about them as their murderers! If the horse knew and felt what he does not know or feel, no horse could be put in harness until he had been schooled to submission by red-hot irons applied in the stable; and every saddle must be furnished with a revolver, to be used by the rider if his nag show temper.

874. It is a fact full of meaning, that in every instance in which man sees it good to exercise the irresponsible rights of absolute property as to life or service over the animal orders, Nature has interposed an interval between him and them—in form, in modes of

life, and in instincts—in body and in mind—which is so wide as effectually to exclude any possible misunderstanding, or questionable case in particular instances. The sheep, the ox, the horse, the bee—birds and fishes, as to all that are slaughtered and eaten, and as to all that are reduced to servitude, and as to all that are domesticated, there is a great gulf of Nature's own making between them and man. There are no midway cases that might be open to an argument.

875. Full of meaning also is this fact, that as to those possibly questionable instances of approximate resemblance to humanity, such as that of the ape tribe in all its varieties, from the baboon to the chimpanzee, there attaches this conspicuous mark—it is Nature's cautionary brand—that they are revolting as food, and are inapplicable to any purposes of labor: they can neither be made to bear burdens nor practice handicrafts: apt they are for mischief, but unapt for service: they are endowed with too much wit to be confided in, but they have not wit enough to be trained to any useful function. It is as if Nature had said to Man, "Beware of bringing humanity under brute law: you must neither slay for food, nor treat as a beast of burden, any species which resembles yourself, even remotely, in form and structure." Man must be careful to deal with his species on another ground, and altogether in another manner.

876. Incalculable mischiefs—miseries that fail not to run out into crimes, and crimes which must repeat themselves in aggravated atrocities, would ensue if there were in any land a species, nearly bordering upon humanity and commingled itself with it, con-

cerning which the question might be raised whether the sacredness of life and freedom of service should be recognized in and toward it or not. If once, on the ground of an apparent inferiority of race or genus, the rights of humanity should come to be violated toward such a race, then the most dire social confusions are let in upon a community, and devastate it as a deluge. In such a community, or in a nation thus cursed, civilization will show its refinements side by side with the atrocities of the lowest barbarism.

877. An invasion of the sacredness of life, or of the individual liberty of service, or a violence done to the sanctities of the domestic instincts—any such outrages as these, so long as the victims are of unquestioned equality in bodily and mental endowments (such as were mostly the slaves of ancient Rome), is indeed a grievous wrong, but it is a wrong that contains within itself a curative tendency. Man, in such cases, is seen to be treating his brother and his equal harshly and unfairly; and some day—a day not in the extreme distance, the disputants shall come into contest on even ground, and the equilibrium of the social system shall be restored. In such instances great wrongs are done and great crimes are perpetrated; but still Nature herself has not been blasphemed; the Social system has been put far out of course, and its relations are hurtfully disturbed; but these temporary and remediable evils do not go deep as a contempt uttered against those awful mysteries of the moral world—a contempt of which Nature avenges surely and without mercy.

878. The belief that the several races of the human species have sprung from different sources, and that

some of them are more ancient than others, is undoubtedly suggested by a first view of the aspect of mankind; and even beyond this, such a supposition derives support from independent sources, physiological, ethnological, and psychological. The tendency of those who have labored to solve the problem on purely scientific grounds had, until of late, been toward this conclusion—that a distinct parentage should be claimed for four, five, or perhaps six of the now extant human races. The contrary belief, which assigns all to the one paradisiacal pair, has been warmly affirmed by those who have imagined the credit of the Biblical history to be in some manner implicated in the determination of this controversy.

879. But of late a reaction has had place in this controversy, and the present tendency is decisively toward the doctrine ot a unity of origin, exclusive of any hypothesis that supposes a distinction of genus or species. Causes, the operation of which comes, to some extent, under our eye, are believed to be sufficient, when the lapse of ages is duly allowed for, to account for even the most strongly marked of these characteristics of races.

880. So far as this problem is to be treated on physiological grounds, it stands excluded from these pages in express terms; so far (if indeed this be the case at all) as the question is connected with Christian Theology, it would of course stand outside of an elementary book on Mental Philosophy. It may, however, properly claim this passing notice when, as now, we inquire whether the upper order in the World of Mind be distributable into Genera and Species.

881. Mind, granting it to be one in essence, yet exhibits a difference, distinguishing the brute mind from the human mind, which is so great, especially if we follow it into its consequences, and the distinction is so fixed and so permanent, that it must be regarded as a generic difference of the most absolute kind. That it is so has this further confirmation, that the two orders do not approach each other on a marginal space by any ambiguous species.

882. And here it should be well noted that instances, either of individual degradation, or of national debasement, or of the barbarism of tribes, have none of the characteristics of original specific distinctions; all are manifestly the products of ill influences, of which we may watch the gradual operation, often among the miserable outcasts of humanity quite near to our homes.

883. If, among the races of the human family, we were to take the most extreme cases of intellectual and moral dissimilarity, such as that of the modern European, and the Papuan, or the Bosjesmen, it would not be necessary to travel a mile from our firesides, dwell where we may, to find individual contrasts fully as great. Nay, is it not so that, sitting around the same table, the types—intellectual and moral—of the Greek and of the barbarian, of the Scythian and of the African, may be pointed to? Certainly it is so in any place wherein are assembled as many as a hundred persons, townsmen and cousins.

884. Whether we take our instances from continents, or from cities, or from near neighborhoods, we shall find it extremely difficult, or we may say impracticable, to substantiate any hypothesis of classifica-

tion; that is to say, we shall not be able to circumscribe any number of individuals with constant lines so as to distribute them into classes or species. Any such conjectural classification will be always breaking down under our hands, and melting itself away, until every aggregate has resolved itself into the individuals which compose it.

XXIV.

LAUGHTER AND WEEPING.

885. It is with perfect strictness, in a scientific sense, that the Hand is affirmed to be the distinction of Man. When the Physiologist gives us this mark of humanity, he is thinking, first, of the relative position of the bones of the wrist and of the metacarpus, and then of the action and counteraction of the muscles which take their points of insertion upon these, and upon the ulna and radius, and especially of the flexors and extensors of the thumb. So far we listen to the Anatomist and the Physiologist; but beyond this we have to note the relation of this structure of the human hand—its bones, muscles, ligaments—to the Mind, of which the hand is the tool. We have to render the Anatomical into the terms of the Intellectual; we have to give the mental coefficients of the bony and muscular structure. Apart from his faculty of abstraction, the hand of man would be an incumbrance; deprived of his hand, the inventive power could only utter itself in petulant impatience, conscious of its want of a prehensive limb such as this.

886. Now, in relation to the subjects before us, we have to go forward nearly on the same path. Laughter and Weeping are incidents of the animal structure, and, as such, they are clearly distinctive of the human species: the Physiologist must give us his explanation of these two movements or agitations of the thorax and its apparatus, and show how it is that the diaphragm is affected, and the muscles of the chest and ribs, and then the pressure upon the lachrymal sac. Whatever we learn from him on this ground is wholly, or very nearly so, peculiar to the human organization. The Laughter and the Weeping of Man may, indeed, find a remote analogy in some of the brute orders, just as the human hand finds a remote analogy in the fore paw of the ape; but the resemblance is not more than this.

887. From the hand, which is at once the symbol and the instrument of Thought, we go up to that Mind which governs and employs it. And thus, from the Laughter and Weeping of Man, we go inward to that soul, the boundless emotions of which find expression in these convulsive motions.

888. When the phenomena of Laughter and Weeping are taken out of the hands of the Physiologist, and are to be rendered into the terms of Mental Philosophy, we find it needful to distinguish, as to each of them, the more simple or organic from the more complicated or purely mental state of the feelings that are proper to each. Laughter, especially in infancy and childhood, is often an instinctive convulsion, expressive only of the exuberant joyousness—the pure consciousness of felicity—the perfect play and accordance of all powers

of body and mind. Weeping, especially in infancy and childhood, is just the contrary of this sense of good; it is Nature's notice of some present pain or want.

889. But beyond this elementary kind, as well of Laughter as of Weeping, we must consider each as the expression of emotions of a peculiar kind, and of more than ordinary intensity. The laughter of adults, when it is not (which it seldom is, unless with the imbecile) an outburst of animal joyousness, is the expression of a SENSE which hitherto has been but imperfectly analyzed or traced to its elements. That aspect of objects seen, or that apposition of ideas presented to the mind by words, or spontaneously presenting itself, which provokes laughter, has a peculiarity, marking it off very clearly from every other aspect of things and from every other apposition of ideas. The subject is one of the most obscure within the compass of Mental Philosophy; and because it is so, it could not, to any good purpose, be pursued, within due limits, in an elementary book. We mention it only in its bearing upon a subject which should not be passed over.

890. The sense of wit and humor—the sense of the ludicrous, is called into action, so we usually say, by the sudden aspect or the flashing thought of some extreme contrast or misfitting, the accidental juxtaposition of things that have no proper coherence—no principle of unison. Yet it is not every or any sort of extreme contrast that excites laughter; far from it; some contrasts are purely painful. It is not merely the apposition of the small and the great, nor of the valuable and the worthless, nor of beauty and deform-

ity, nor of virtue and vice, nor of well-being and misery. Some other ingredient or adjunct is needed to constitute the ridiculous—to provoke laughter.

891. There must be present in any such instance a moral element of some kind: we must have before us, whether actually in view or only thought of, a being of like constitution with ourselves (or like so far as the particular occasion requires), to whom, as to his appearance, or his attire, or his behavior, there attaches some extreme contrariety of which *himself is*, or pretends to be, *quite unconscious*. A mere derangement in the attire of a grave and official person, of which himself has no knowledge or suspicion, is enough to provoke the open or the smothered laughter of a thousand sober-minded spectators. The harlequin exhibits on his person some such incongruity; and then, to give it force, he assumes an aspect of gravity, as if he had no consciousness of the fact that his appearance is absurd. A peculiar expression of care-worn gravity it is which makes the antics of the monkey ludicrous. Wit is the imputing to a person an inconsequence or an incongruity, which is so glozed over by an artful commendation (implied or expressed) that he may be tempted to accept it unawares, and so be unconscious of the ridicule to which it exposes him.

892. Whether these explications may be accepted as true and sufficient or not so, this is certain, that the being who is provoked to laughter in sight of the ludicrous must himself be possessed of mind enough to apprehend the *upper* as well as the *lower* quality, from the contrast of which the sense of the ludicrous takes its rise. There must be a sympathy or a conscious-

ness toward the great, the grave, the noble, in him, whatever may be the rank assigned him on the scale of intelligence, who is affected to laughter by the sight of its juxtaposition with what is mean, ignoble, insignificant. The sense of wit—the sense of the ludicrous, is a consciousness, not of one element, but of two, and of the upper one not less than of the lower.

893. It is on this ground that we may confidently challenge humanity, with its entire circle of rights, its inherent dignity, and its *recoverableness*, if it has fallen, in behalf of any race that laughs.

894. If this be granted—and the more we pursue the principle into its source and its consequences, the more convinced shall we be of the validity of the claim—if this be granted as to the joyous side of humanity, a parallel claim will, with still more readiness, be allowed on the contrary side, and we shall be prompt to accord the sympathies, and the rights, and the dignity, and the redeeming qualities of humanity to any that weep.

895. Again, we must take care to distinguish that which is organic from that which is more properly emotional. The shedding of tears with sobs is the characteristic of babyhood or childhood when it is the expression of bodily pain at the moment. The weeping of the adult—woman, and it is still more so with man—is the product of emotions, whether of anger and petulance, or of grief; it may be disappointment, or wounded social affections, or loss of the loved, or loss of love itself. If laughter relate principally to the present hour or passing moment, weeping, when it is not simply organic, is retrospective chiefly.

896. Weeping, if it be of that kind which is properly termed emotional, is of two kinds, for it is prompted either by feelings that are personal and seclusive, or by such as are social and sympathetic. Not as if distinctions of this sort were entirely analytic; yet they are sufficiently accurate to be available for the purposes now in view. Grief or sorrow, the spring of which is mainly or entirely personal, implies that ruminative habit of thought which brings the individual lot—the individual fortunes and history, into perspective, so as that it is contemplated from one point of view. The good and the ill of the personal history may give rise to feelings of remorse, or of resentment against those who have inflicted injuries: there may be the recollection of shipwrecked fortunes, of misused opportunities, of misjudgments, and of damage sustained by sheer fortuity. Whoever weeps in any such manner as these is the possessor of the elements of all degrees of moral culture, and he may well vindicate his claim to that treatment which is granted to be the right of the loftiest samples of human nature.

897. Weeping at the impulse of the domestic instincts or of the deeper social affections—the cementing affections — gives a still higher sanction to the rights and dues of humanity. If the maternal instincts in brute natures show some approach to the warmth of human affections, they do but exhibit, by contrast, the far greater force and the enduring intensity of the latter.

898. That which among all its elements is the most *human* in humanity is its affections—the social affections; or, to say all in a word, LOVE. Take a look

round in any circle that may be inclusive of twenty persons. Admiration, and a willingness to follow and to be taught, goes over to that one of the company who is the most conspicuous for clearness and force of Reason, or for accumulations of available knowledge. But after this homage has been rendered to a faculty or a power which is bowed to because it *can* and it *will* maintain its own prerogatives, we turn—we do it involuntarily—to render a homage of far deeper meaning to the one, man or woman, in whom the social affections are pre-eminently developed. Love, when it is set as a jewel upon a healthy Reason, gives a title, which is never called in question, to the deepest reciprocative regard in all minds that come within its circle. The pre-eminence of Intellect is left to vindicate its own position in the regards of others; but the pre-eminence of Love is assented to with so much the more readiness—with an instantaneous promptitude—on this very account, that it is not careful to assert itself; that it does not challenge its proper rights, and that it is not much disquieted even though they should be withheld.

899. All—or all but the foulest natures—all render a willing homage to the social affections; and so much the more readily do we all do so when the subject of them has come to be in a helpless social position. The tears that flow, either in the endurance or at the sight of an outrage done to the domestic affections, such tears burn themselves into that page whereupon all doings on earth are recorded which ETERNAL JUSTICE shall hereafter bring to a reckoning. When we say such things as these, we do not trespass further

upon the ground of conjecture than this: we assume the fact that human nature is embraced by a Moral System, which is as broad as heaven itself, and which is more steadfast than suns are in their spheres, and which, at some epoch in the history of the human family, shall realize itself, with unfailing exactitude, in the destiny of every inheritor of an after-life.

900. The faculty of speech in the human organization declares the social nature of man, for it has no meaning other than that which it derives from its relation to this sociality. On the very same ground, these two organic expressions—laughter and weeping—of two classes of emotions are sure indications of that same intention which places the individual man in correspondence and communion with his fellows. Laughter and weeping are spontaneous utterances of vivid emotions, which, while they cement the social system, imply more than a bare relationship of mind to mind, for they suppose mutual dependence and obligation; they suppose homogeneous moral elements, and a consequent reciprocity of rights and duties.

901. It is not possible that we should always "laugh with them that laugh;" but whenever we feel that we can not "rejoice with them that do rejoice," undoubtedly there is something wrong, either on their part or on ours. We can not always "weep with them that weep;" but whenever we fail to sympathize with such, undoubtedly there is something wrong, on their part or on ours. On their part the sorrow may be quite imaginary, or it may have taken its rise in some wrongful assumption. But if the grief in which we do not sympathize be real and right, then this default of sym-

pathy on our part must arise either from the callous condition of the social affections within us, or from the brutalizing effect of savage usages, in which we have always been accustomed to take a part, and to look upon with apathy. The consequent mischief, when it is of the first-named sort, is limited always; for the individual who has thus been born out of the course of nature, bringing into the world with him the nerve and soul of the hyæna, soon comes to be outlawed by the contempt and dread of those around him.

902. When the default of sympathy with genuine griefs, especially with those griefs that spring from the domestic instincts, arises, as we have said, from the brutalizing effect of barbarous usages in which, from childhood, we have been accustomed to take part, then, and in every such case, the "Social Institution" by which such usages are sanctioned is itself A CRIME, and it will be germinative of crimes, until a community so deeply plague-smitten becomes the nuisance of the world.

XXV.

SUMMARY.

903. WE have affirmed (821) that the progress and the successes of the two recent sciences—Astronomy and Geology—have served at once to exemplify and to authenticate certain logical methods, and to give us confidence in applying these methods to subjects outlying beyond the range of strict demonstration. We have said (823) that we may avail ourselves of such

methods *safely* and *surely;* yet more than this might be affirmed, for these logical procedures are not only *safe*, but, as to a wide range of thought, they are our *only* mode of making any advance, in the way of inferential reasoning, beyond the point where we have the direct evidence of the senses.

904. The Physical Sciences occupy, and explore, and cultivate an area which might be spoken of as an island lying midway in an ocean which, as to the human intellect, is shoreless and fathomless. This *terra cognita* embraces just so much of the material universe as we become cognizant of by the senses, and by the most infallible kind of inference or induction. When we set a foot forward beyond the limits of what is known in this direct manner, and intend to make good an estate—a territory recovered from the wastes of the unknown, we are at every step compelled to trust to methods of reasoning which assume much that can never be made demonstrably certain, but which, whether it be strictly true or not, gives a sure support to our after-reasoning.

905. All reasoning concerning Gravitation — all concerning the laws of light, as well as the entire scheme of our modern Chemistry, and the postulates of magnetism and electricity, together with what we take as our basis in Physiology—all these processes include *hypothetic conceptions* concerning the atomic constitution of the material world which are purely gratuitous, and the absolute truth or reality of which we can scarcely hope ever to ascertain. Nevertheless, it is enough if, after the *petitio principii* has been tacitly allowed, we go on to reason in a strictly infer-

ential manner. If Light be an undulation, taking place in a universally-diffused substance or elastic gas, then we may advance upon our path with a steady step in demonstrating the laws of this undulation. Yet it is a vast assumption that has, in this instance, been made at the outset; but we know it to be an assumption, and it subserves our purpose, although of this elastic matter we have no direct knowledge, nor of these waves.

906. The same kind of venture must be made—it is not a less venture, nor is it a greater—if we would make any progress in reducing vague, rambling, spontaneous meditations concerning the Intellectual System to any sort of order, or in giving our thoughts in this direction some coherence, and any thing of a scientific aspect.

907. The first of these assumptions needful in giving a scientific form to Intellectual Philosophy is that of the Reality and the independent existence of the Material world. We call this an *assumption*, because to suppose that it may be shown to be true, or be demonstrated in logical style, is to suppose that we have the power to recede or ascend to a position anterior or superior to our consciousness of the properties of matter, so that we may look down upon this consciousness, and analyze it, and dispose of its elements, and thus, perhaps, unfold the inner constitution of that which these elements may inclose. Nothing remains for us in this case but the alternative either to allow the reality of the external world unproven, or to bring into question, on even grounds, the reality of the World of Mind; and then, when we come to look

at the two hypotheses, each of them separately undemonstrable, we shall find ourselves in a fit mood for admitting the last absurdities of universal skepticism; or, rather, we shall have come into a state of mind so helpless and so hopeless that it may be called intellectual paralysis, a morbid affection which is incurable.

908. An admission of the reality of the *external*—the *material* world—carries with it, tacitly, an admission of the reality of our own consciousness, which includes the knowledge of that world. Then what is next needed as a basis of Intellectual Philosophy is a free and unconditional acknowledgment of the Reality of Mind as an existence apart from matter, and not partaking of any of its properties.

909. Care and caution are needed on this ground; and more than care merely, for we need a disciplined faculty of thought. What we have to assume or affirm is not the actual fact of the *separate existence of Mind from matter*, for of this we know nothing; nor are we to affirm that Mind may release itself from its connection with a material organization, for this is a supposition to which we have no means of giving support.

910. What we have to affirm is simply so much as our consciousness attests, and in relation to which there can be no room either for demonstration or for doubt. I am conscious of Thought, Feeling, Power, and of Individuality; but as to any imagined *substance* to which Thought, Feeling, Power, Individuality adhere, and of which they are the products or the results, I have neither an acquired knowledge of it, nor any inward indication of it as a fact.

911. Nevertheless there *may be* such a substance, albeit I have no knowledge of it, direct or indirect; and this substance may possess solid extension: it may be an atom, indivisible, insoluble, and infinitely small, or it may be an ether or gas infinitely rare. But as to any suppositions of *this* sort, though they may seem to administer some ease to the imagination in its attempts to think of Mind apart from the animal structure, they can give us no aid whatever in our endeavors to bring Intellectual Philosophy into form. On the contrary, suppositions of this class operate illusively, and they foster that tendency to philosophize upon the phenomena of Mind in the terms and style of Physical Science—a practice which has shed so much confusion upon this region of thought. If Mind be an ether, very rare and highly elastic, then, no doubt, it may have its vibrations, or its undulations, or its tremors, or its affinities with other rare ethers or gases, and so forth. But let any one who is accustomed to sustained thought ask himself whether he can attach any meaning whatever, less or more, clear or obscure, to the terms and phrases of Physical Science, and the modes of reasoning concerning the properties of Matter when they are applied to his own Consciousness of Thought, Feeling, Power, Individuality.

912. We shall have set a good foot forward on solid ground—we shall have made an acquisition worth the labor it has cost us when we have brought ourselves to acquiesce fully and freely in the belief that Mind and Matter are both of them REAL EXISTENCES, not one the product of the other, but each absolute in its own manner. If we assent to this belief—knowing it

to be a *Belief*, not a proposition provable—then we shall find that it serves us well as an hypothesis with which all facts, as well of physical as of intellectual and moral philosophy, perfectly consist; and then, moreover, we shall feel ourselves relieved from the bootless labor of attempting to open up the mysteries of Mind by aid of the laws of matter, or of theorizing on the connection between the two worlds.

913. We may take to ourselves this Belief with a feeling of comfort, and may then look abroad upon this vast scheme of twofold existence—the two worlds of MATTER and of MIND—with a sort of expanded or emancipated consciousness toward the latter, that is to say, the universe of Thought, Feeling, Power, embracing the innumerable company of those who are individually possessed of sentient and causative existence. Many questions, deep, perplexing, interminable, and unproductive also, start up, and would disturb our meditations when this boundless field is before us. It might be asked, Whence and when do individual minds come up in the development of the great scheme ot organic animal life? Are minds anterior to organization? Are they posterior to it? May individual consciousness stand when animal organization falls? In many forms might questions and surmises of this sort be fashioned; but they have the loose quality of *meditations;* they possess no scientific coherence; they lie far outside the range of human observation or Reason. As to the bearing of these, or of any analogous speculations upon questions of Morality or Theology, nothing can be more unwise than to entangle the firm principles either of morals

or of religious belief with films of conjecture such as these.

914. A full, free, and unexceptive acceptance of this First Postulate of Intellectual Philosophy, namely, the absolute Reality of Mind apart from or irrespective of Matter, clears the way for an admission of its Second Postulate, namely, the Causative Property of Mind; the term causative understood in a sense which at once distinguishes Mind from Matter, and which affirms for Mind an unconditioned force as its primary rudiment.

915. This second postulate must, like the first, be conceded as a Belief, and not as if it were, along with a multitude of propositions, sustained by a mass of evidence which yet falls short of demonstrative certainty, but because itself stands anterior to every logical process: it is a Belief which, if we decline to accept it, we are deprived not only of all belief, but of the very means of attaining any.

916. In assenting to the First of these two Postulates, we simply abstain from affirming or denying any thing on ground where we have no knowledge. Thought and Feeling are utterly unlike any of the properties of Matter with which we are acquainted, and we rest upon this unlikeness as reason enough for not attempting to apply to Thought and Feeling the terms and methods of Physical Science. But now, as to our Second Postulate, we are safe in advancing a step beyond any such negative affirmation or any such mere plea of ignorance. When we affirm the unconditioned Causative prerogative of Mind, and its absolute liberty as distinguished from physical causation of every sort,

we do but put into the form of a proposition a principal element of Consciousness: we allege what we should never have thought of formally affirming, as if it might be denied or questioned, if we had not found ourselves encountered, in schools and in books, by the pedantic paradox which tells us that any such causative liberty is inconceivable and impossible.

917. The subsidiary attestations which may be listened to, if we would arm ourselves against sophistries which we can not refute, are such as these. This Belief of the Causative Property of Mind, which is the primary dictate of consciousness, consists perfectly with each of those principal facts of human nature which, on the contrary supposition, are inexplicable riddles.

918. This same belief comports well, to say no more, with the hypothesis of a Moral System and of a scheme of government founded upon Declaratory Law, not taking effect as a latent or physical law; and when we affirm this as to a scheme of *Moral* Government, we affirm a portion only of a Great Truth—that Truth, namely, apart from a recognition of which there can be no Theology for Man, or none of which he may avail himself as the foundation of the religious life.

919. Once and again (376 and 705) we have affirmed that in any instance, if a Belief is found to work harmoniously with the functions of human nature, such an accordance may safely be taken as an indication, or, indeed, as proof of its reality; we may accept it as a truth, and need not suspect it as an illusion. Now on this ground we rest our THIRD POSTULATE called for in constructing an Intellectual Philosophy, namely,

that in the original structure of the Mind there is nothing fallacious—nothing contrary to the reality of things; nothing that is spurious or factitious, and which, when we come to be better informed, we shall reject or denounce as a disguise, of which the human race, or the uninstructed many, is doomed to be always the dupe and victim.

920. It might seem superfluous to make a formal demand of this kind on behalf of the Creative Wisdom, and yet, in fact, several schemes of Philosophy, ancient and modern, have implied the existence of some such delusion as attaching to the original framework of human nature.

921. Take the instance of the momentary sympathies, and of those enduring affections which cement the social system. They are *real*, or, we should say, *substantial* as distinguished from animal instincts, which rise and disappear with the presence and removal of their immediate objects: they are *real* as distinguished from all forms and disguises of the self-intending instincts and emotions, for they often impel the subject of them to courses of conduct that are directly opposed to the promptings of those instincts. But more than this, these sympathies and these profound affections are REAL, inasmuch as they connect Man with that universal scheme of Moral Government, his relation to which is vouched for by the firmest and the most enduring of his convictions.

922. We have to make our choice between two incompatible systems of Philosophy, or two modes of interpreting human nature. According to one of these systems, wherever there is the most feeling, the most

of sympathy (or the semblance of it), the greatest intensity of affection, or of what is imagined to be affection, there—and precisely in proportion to the warmth and the force of the emotion, is there the largest amount of artificial sentiment and of self-deception. According to *this* Philosophy, he who imagines that he loves, not himself, but another, is, just so far as he indulges such an illusion, the victim of a conventional prejudice, which it is the privilege of the philosopher to despise.

923. But there *is* another scheme of human nature, and there is a more Positive Philosophy; and according to this system, we take it as an axiom that, the more *Feeling*, so much the more *Reality* in every case; the higher the intensity of the benevolent emotions, so much the nearer approach is human nature making to the great world of Love and Order. According to *this* Philosophy, the most false of all the false things on earth is a pure selfishness; the greatest of all delusions, as well as the most fatal in its consequences, is that of the human being who makes himself his centre, and his individual well-being his end.

924. What is here affirmed concerning the Sympathies, the Emotions, the Affections, may be affirmed also concerning the Tastes, and the Sense of the Beautiful and Sublime. There is a popular philosophy which resolves these Tastes into a complexity of associations, as if they sprang up out of nothing, and came to be what they are by endlessly multiplied reverberations. It is as if we were to affirm that Daylight is the product of reflections from whited walls, and any other light-colored surfaces—chalk-hills, clouds, and so

forth, instead of accepting the hypothesis that it reaches Earth direct from the Sun. We challenge the sense of the Beautiful and the Sublime in this our Positive Philosophy as a faculty of the Human Mind, and which, while it is the source of inestimable enjoyments during our passage over this present stage, is indication of our relationship to a stage of things brighter and fairer than this.

925. When we have conceded the above-named Postulates of a Positive Intellectual Philosophy, we shall scarcely hesitate to concede that next demand of the same great principle, which is needed as the basis of a true Moral Philosophy, namely, this, that the Moral Sense is not a factitious conventional impulse, variable among the several races of the human family, and which possesses no constant authority, but that it is a faculty of human nature, and a sure indication of the relation of the Human Family to a system of universal and immutable Government.

926. But these terms can have no meaning if they be taken apart from their implicit theological sense. In other words, a Philosophy of Human Nature can have no coherence until it embraces the First Principles of a True Theology, and by this we can intend nothing else than a Christian Theology.

927. Thus far we are entitled to go: we include nothing that is *probable* only, or that has the unfixed character of an excursion upon the fields of conjecture. Yet how easy would it be thus to pass beyond our strict bounds! The very title of this volume might seem to convey an intention to attempt the unknown on the field of worlds remote from this. There is, in

fact, a warrantable range of meditative conjecture—there is ground for theoretic speculation as to orders of beings or modes of existence other than those which are limited by the conditions of the present animal organization. The very structure of the material universe seems to speak of modes of life—a lower and an upper; an organization adapted to the alternations and the variableness of planetary temperature—light and heat; and an organization adapted to the æonian stability—the invariable day and summer of the solar surface.

928. From all such speculations, and from others which it would be easy to indicate, we turn aside, and insist upon such things only as may claim to be regarded as proper inferences from unquestioned facts. Resting upon the certainty of those methods of reasoning which lately have carried the human reason outward toward the infinite of Space and Duration, and have given it a firm lodgment in the very midst of the unknown, we have said (822) that we may safely reason onward beyond the range of immediate knowledge when we take up any one of the constituent principles of human nature, and follow it out to its consequences, assuming only this axiom, that Human Nature is not, in its very structure, a fallacy or an illusion.

929. The consciousness of Power as the first rudiment of Mind, and of Intelligence as the guide of its exercise—the consciousness of fitness and order, and the love and pursuit of good—these intuitions, apart from any logical processes, give us the conception of Supreme and unrestricted Power, and of Absolute Intelligence, and of Sovereign Goodness. If we could

need proof that this inference is included in the framework of human nature, we should incline to appeal not so much to the universality and constancy of the theologic belief, as to the laboriousness and the ingenuity of the endeavors that, from age to age, have been made by a few sophisticated minds to make the atheistic paradox tolerable to human reason.

930. Yet further. It is true as to the deeper and the more intense affections—it is true as to human love and hatred—it is true in what is tender and in what is cruel—it is true as to human purposes and ambition—as to its projects and ends—it is true in hopes and in fears—it is true in whatever is generous, in whatever is the most dire, that these developments of human nature, as well intellectual as emotional, are never commensurate either with the immediate occasion or with the persons, the transactions, the incidents of the place, the hour, or the day. These evolutions of the human mind and soul are most often greatly out of proportion to the things to which they seem to relate; and especially true it is that the deepest affections are regardless of Space and Time: in the purest Love there is a large ingredient of the infinite.

931. Again, further forward we may safely go. More profound than even his affections, and more far-looking than his ambition, is that Moral Sense before which, when it wakes itself up, Man bows and quails, and confesses that he stands accountable to ONE greater than himself.

932. An inference, then, which is not to be rejected unless we abandon the very ground upon which any and all reasoning must rest, is this: that whereas Mind,

in the animal orders around us, is, with absolute precision, related to the immediate occasions of animal life—Mind, in the human family, is not in any such manner related to the spot, and the hour, or the occasion, but is so constructed as to relate itself spontaneously to a remote futurity and to an unknown stage of existence.

933. When the world of Mind, as exhibited on the great stage of human affairs, is in view, and when the discouraging fact is before us of the very partial and exceptive development of the higher faculties of human nature, we find the need of an explicative principle such as has already been adverted to (452, and in Section XIII.). The human Mind contains no Law of Development taking effect as a constant physical law. Development of the faculties, intellectual and social, is, in every individual man, and in nations and races, contingent upon the presence and application of some exciting cause from without.

934. At a first glance of the subject, the very contrary of this might seem to be what we ought to look for. When we affirm, as we do, on behalf of the human Mind, and affirm it to be its distinction, as compared with the animal orders, that it possesses an inherent Causative Power—a spring from within, which sets it forward, or which may set it forward upon a course of boundless advancement, how shall we understand the fact that development and progress are conditional and exceptive?

935. The expansion of the Human Mind does not take place uniformly and universally for this very reason: that a Causative Power having been conferred

upon Man—and upon him alone, in the fullest sense, among the animal orders—no other provision has been made in his constitution for securing the development of his faculties. This inherent force is amply sufficient for this purpose, if only it be put in movement *from without.* An admirable mechanism is before us, but it is at rest, and it will forever remain at rest unless a finger—a force foreign to itself, give the start to the pendulum.

936. The infant man is not only helpless as an animal, and absolutely dependent upon others for mere life—and he is so through months and years, but his Mind also must be nursed and evoked, or, if not, he will live and die in a condition far less desirable than is that of the orders around him. The fate of the individual Man truly symbolizes the history or the fate of nations and races. A tribe—a race, marked as the same from age to age by its physical characteristics, occupies or roams about upon its unfurrowed allotment of territory through uncounted centuries. It does so until the day of awakening from without dawns upon it; or, if no such day dawns, the race becomes extinct, or it gives room to another that itself has received the quickening visitation from a higher source.

937. It is not then a paradox to affirm that that moral and intellectual degradation—that state of perdition in which we often find Man individually, or nations—is the very ground upon which we rest our hope of being able to call him or it up to a higher place. It is the fallen who may rise. Barbarism is the condition of tribes that either have wanted the initial movement of civilization, or who, having once, in some re-

mote age, possessed it, have lost it under pressure of material destitution or sudden catastrophes.

938. But is the human family, as one, destined to advance or to recede on the road of moral and intellectual development? A question, this, of great compass, and not, perhaps, of so easy solution on the favorable side as at the moment we may be apt to imagine. The probabilities on the one side, and those possible mischances on the other, which throw the shadow of a cloud upon the bright field of hope—these grounds of anticipation—embrace facts and reasonings, so many and so diverse, that scarcely any thing touching the past and the present condition of nations would be left out of the account.

939. From so vast an argument as this we hold off; but it belongs to our theme, in this volume, to advert, in its closing pages, to a single element of the general subject. An argument concerning the probable destiny of the human family, vast and various as it is, yet converges toward a centre, and it offers itself to our view as if the materials were compacted around a nucleus. In attempting to find this central point, we may at once put out of view all calculation as to the possible advances of partially civilized nations; for if indeed these, or any of them, shall at length be brought to occupy a higher condition than they have filled for many ages, such an event must be regarded as only a bright possibility on the remote horizon of the world's history.

940. In like manner, and without giving way to any ungenerous prejudices, we may exclude from our calculations concerning the progress of nations those

among them that, after centuries of probation, near to the broad daylight of intellectual, and moral, and political advancement, still yield themselves inertly to superstitions and to despotisms which cramp and crush the soul, and which are now visibly mantling upon the spirit of the people, and bringing upon them a slumber of sensuous acquiescence in the fate which they can look at with apathy.

941. In like manner, and apart from the influence of controversial prejudices, we may put out of view, on this ground, any communities, if any such there are, whose usages and whose institutions, the horrid relics of ages of barbarism and ferocity, sin flagrantly against humanity, and which, if they are still fondly clinging to them, brutalize even the better spirits among the people. Nature seals the doom of communities that set at defiance the primary instincts of the moral economy. Decay, not advancement, is their inevitable future.

942. The conservation of the bright destinies of the human family must be supposed to have been committed to those nations or races that, beyond others, are the careful and courageous guardians of Liberty, Civil and Religious; nations that, more than others, are alive to the claims of justice and of mercy; and it is the same people that will be, although the faulty, yet the firm adherents of the only Truth, the Christian system.

943. Thus, then, our argument narrows its ground. We may, however, still find our way further in toward a central point. But here it should be understood that a centre may be such *theoretically*, and yet it may not

be the actual focus of light, heat, and force in the social system. So it is in the instance before us. The actual focus of light, heat, and force within a free, a cultured, and a Christianized community, the very core of its life of thought and feeling, will be found many degrees remote from what we should call its theoretic centre. The *theoretic centre* of the national mind, in a country such as we are just now imagining, is the educated intellectuality of the people, or its Philosophic Creed—its holding on the ground of Abstract Principles. There is reason in the question concerning a People whose futurity we might be wishing to divine: What is its tendency, and its mode of thinking upon the Primary Problems of the Higher Philosophy?

944. In the earliest pages of this volume the writer was careful to exempt himself from the imputation of attaching any exaggerated importance, in a practical sense, to his subject, Mental Philosophy. The world is ruled by forces that are far more substantial than are those of Intellectual Science. Nevertheless, Intellectual Science must be allowed to have a real value of its own, and it would be a serious error to disallow its claims as a main element in education. These claims rise in importance when it appears that errors of malignant quality are rioting around us, and that they do so in default of that training of which a genuine Philosophy should be the guide and the impulse.

945. Allowing, then, to Intellectual Philosophy a place of real, though not paramount importance in its bearing upon the advancement of a cultured people, and assigning to it its due position of honor as the

theoretic centre of the national mind, there is reason enough for our wishing to see this branch of learning receiving improvements, and especially for desiring that its doctrines may be brought into conformity with Truths that are more sure than its own axioms.

946. But this we may regard as certain, that while the influence of Intellectual Philosophy upon national progress may never show itself to be much more than what is just appreciable, the reactive influence of national progress upon Intellectual Philosophy will not fail to be beneficial in a very marked and decisive manner. Those, therefore, who are occupied in this department of labor may take the comfort of believing that, although they ought not to aspire to mend the world with their Philosophy, the world itself, if it be in course of improvement, will, at each stage of its advancement, assuredly amend their Philosophy.

947. The intellectual, the moral, the political (or economic) advancement of a nation, inclusive always of the steadiness of its adherence to Christianity, and its practice of the Christian virtues, will always be bringing before the popular mind some object of the highest moment and of the most urgent necessity relating to the welfare of the masses of the people. The energies of leading minds, borne forward by the force of practical good sense, will find, as if instinctively, the solid ground of truth in morals and in social science. There will be a diffused right reason prevailing throughout the educated classes which will effectively discourage and exclude vague and monstrous speculations concerning the first principles of human knowledge. If at this moment those spurious philosophies

were to be named which, in times past and lately, have seemed to threaten morals and Religion, and to throw us (as to speculative belief) into the abysses of atheism or universal doubt, it might safely be affirmed, as to each of them in its turn, that, though it should never meet its overthrow in halls of learning, it must evaporate as a mist on the walks of life, if only men are *moving forward* under the guidance of those same unchangeable principles.

948. Freed from paradox and unfathomable mystifications, and brought up from its metaphysic depths, and pursued and taught in the neighborhood of those great movements which must attend the progress of men in society, then, and while it is laid open to influences of this salubrious order, the Philosophy of Mind shall perhaps win for itself a place much nearer than at present it occupies to the focus of light, heat, life, and power in the social system.

NOTE.

At the end of the Ninth Section there occurs a note in which I have expressed the intention of bringing into a Supplementary Section some facts of a mixed kind, physiological and psychological, illustrative of what is there affirmed concerning the development of mind in the animal orders around us; but to be of much avail in support of the general argument, such illustrations must be much more copiously adduced than the limits of this volume will now admit. In truth, subjects of this class would best be treated by themselves, nearly allied as they are to those which are strictly proper to Animal Physiology; for when they are associated with what professes to belong to Mental Science, the risk is great that a confusion will take place in the reader's mind, and he will find himself insensibly drifting away from that which is purely intellectual toward that which is organic and physical; yet to preserve inviolate the distinction between the two departments should be the earnest endeavor of those who undertake to write and teach on either side, and especially so on the side of the Philosophy of Mind.

THE END.

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